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ABSTRACT

Education has emerged as a leading national issue for the 1990s. To address some of the current and future issues facing education, Metropolitan Life Insurance Company asked members of the Metropolitan Life Foundation Education Advisory Council to articulate their views about recent and future directions in public-school-improvement efforts. This book, a collection of council members' essays, offers a profile of education in the near future. Articles include the following: (1) "The Implications and Rewards of Teacher Empowerment" (Floretta Dukes McKenzie); (2) "Education Reform: The Good, the Bad, and the Ugly--A Teacher's Perspective" (Kim Natale); (3) "Revolution in Pedagogy" (Patricia Albjerg Graham); (4) "Teacher Leadership in Reforming Education" (Sherleen Sisney); (5) "Using Current Technologies in Education" (Joan Ganz Cooney); (6) "Class and Caste in American Schools" (Joseph S. Murphy); (7) "Rethinking Children's Policy: Implications for Educational Administration" (Michael W. Kirst and Milbrey McLaughlin); (8) "Changing the System of Schooling So That the School of the Future Has a Chance" (Frank Newman); (9) "Incentives for Reform" (Albert Shanker); (10) "Federal Support for Teacher Improvement" (P. Michael Timpane); (11) "The Imperative for Global Education" (Mary Hatwood Futrell); (12) "Business-School Relations for the 1990s" (Robert G. Schwartz); and (13) "Taking School Reform Seriously--A Parable from War" (Theodore R.Sizer). (LMI)

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Preparing Schools for the 1990s

JOAN GANZ COONEY

KIM NATALE

MARY HATWOOD FUTRELL

FRANK NEWMAN

PATRICIA ALBJERG GRAHAM

ALBERT SHANKER

MICHAEL W. KIRST

SHERLEEN SISNEY

FLORETTA DUKES MCKENZIE

THEODORE R. SIZER

JOSEPH S. MURPHY

P. MICHAEL TIMPANE

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CONTENTS

Foreword from Metropolitan Life

PREPARING SCHOOLS FOR THE 1990s:

FROM CLASSROOM...

The Implications and Rewards of Teacher Empowerment

— Floretta Dukes McKenzie

Education Reform: The Good, the Bad, and the Ugly — A Teacher's Perspective

— Kim Natale

Revolution in Pedagogy

— Patricia Albjerg Graham

Teacher Leadership in Reforming Education

— Sherleen Sisney

Using Current Technologies in Education

— Joan Ganz Cooney

TO COMMUNITY...

Class and Caste in American Schools

— Joseph S. Murphy

Rethinking Children's Policy: Implications for Educational Administration

— Michael W. Kirst and Milbrey McLaughlin

...TO PUBLIC REALM

Changing the System of Schooling So That the School of the Future Has a Chance

— Frank Newman

Incentives for Reform

— Albert Shanker

Federal Support for Teacher Improvement

— P. Michael Timpane

The Imperative for Global Education

— Mary Hatwood Futrell

Business-School Relations for the 1990s

— Robert G. Schwartz

Taking School Reform Seriously — A Parable from War

— Theodore R.Sizer

FOREWORD

Education has emerged as a leading national issue for the 1990s. While the well-being of our schools, and our children, concerns us all, such concern may profit from greater familiarity with important developments in education. With that goal in mind, Metropolitan Life Insurance Company asked members of the Metropolitan Life Foundation Education Advisory Council to articulate their views about recent and future directions in the efforts to improve our public schools. Established in 1985, the Council is comprised of distinguished education leaders, and is chaired by Joan Ganz Cooney, Chairman and CEO of Children's Television Workshop. Since its inception, the Council has guided the Metropolitan Life Foundation in developing its education programs, providing a focus on issues of national importance.

For this publication, each Council member has written on education in the 1990s. Taken as a whole, the collection sketches a profile of the schools of the near-term future. The issues covered range from technology in the classroom, to the failings and promise of education reform; from the education challenges inherent in global economic competition, to the problem of how to help children at risk.

Met Life's interest in education is longstanding, and has taken many forms, one of which is the Metropolitan Life Survey of the American Teacher. Conducted on seven occasions since 1984 by Louis Harris and Associates, Inc., the survey was conceived to reach out to classroom teachers as a group, and to provide a voice for their concerns. It has contributed to the national debate on teacher concerns during the 1980s education reform movement. Like the present essay collection, this year's survey addresses the schools of the 1990s; the essay collection and survey may serve as companion pieces.

To underscore our recognition of the critical importance of education issues, Metropolitan Life Insurance Company Chairman, President and Chief Executive Officer Robert G. Schwartz has also contributed to the collection. Mr. Schwartz's essay outlines the challenges of business involvement in education, and the need for a supportive, carefully-crafted approach to business-school relations.

It is our hope that this volume will provide useful insights for the critical national effort to improve education and to enrich the future of our children.

THE IMPLICATIONS AND REWARDS OF TEACHER EMPOWERMENT

Floretta Dukes McKenzie

Catch phrases and fashionable descriptors seem to accompany virtually all waves of change in American society. Education has not been exempt from this phenomenon and the 1980s reform efforts brought us a host of new verbiage such as "at-risk" children, "school-site management," "restructuring schools," "teacher professionalism," and of course, "the rising tide of mediocrity."

And although these often used (and eventually, over used) words tend to galvanize attention to a particular subject area, they rarely carry a well-defined message and are applied generally to widely varying sets of circumstances. Such has come to be the case with the phrase, "teacher empowerment."

Empowering teachers most commonly appears to refer to "allowing" classroom teachers to participate more directly in their schools' decision-making. But unanswered in this view of empowerment are questions such as: What forms of participation are intended — consultation? information-sharing? or actual decision making authority? Which decisions should include teacher input — textbook selection? school rules? budgeting? hiring of staff?

Furthermore, how do education administrators propose to engage teachers in the "empowerment" process — is teacher involvement in a wider range of school affairs important enough to alter teacher workloads or is such participation to be tacked on to the existing responsibilities of teaching, paperwork, classroom management, etc.?

In its current ill-defined state, "empowerment" also has come to have a number of teacher training references. For many, empowerment means providing teachers with additional training in any number of areas which have landed on education's doorstep. Certainly, empowerment does involve equipping teachers with sets of skills and abilities to better perform their jobs, but will haphazard doses of training in computer literacy, substance abuse prevention, test-taking strategies, etc., truly "empower" the teaching force to make a significant improvement in the academic success of children?

Another Quick Fix?

It is not surprising that the notion of teacher empowerment would be identified with a narrow range of actions designed to bring about some fast results. The quest for quick fixes in education is seemingly endless, despite a widespread realization that the challenges confronting schools today are among the nation's most complex and intransigent problems.

In the 1980s, education received a great deal of long overdue attention. And while the harsh focus of the public spotlight may not have been welcomed, it did generate a renewed sense of education's critical importance to the well-being of this nation. The 1980s reports, studies and commissions on education also created a sense of urgency about improving schools and with it, the spate of catch phrases and "do it now" reforms.

In the 1990s, the challenge will be to capitalize on this education focus and delve behind the labels and the band-aid remedies to produce genuine, sustained results. The discussions and ideas about education which have emerged in this decade have merit; the next 10 years should focus on putting some "meat on the bones" of these proposed solutions.

Just as "restructuring schools" will have to mean more than relocating the bureaucracy of school management if such efforts are to achieve their intended goal of producing better schools, "teacher empowerment" will require a more systemic approach and broader definition if the promised rewards of a dynamic, creative teaching corps are to be realized.

Changing Role of Education

The empowerment of teachers must be cast and developed in recognition of the evolving role of education in American society. Key to this role is a knowledge base which is expanding exponentially. This information bombardment has a profound implication for education: no longer can a particular prescribed set of "things everyone should know" suffice as an adequate education. The information needed to function productively is growing at such a pace that materials and curricula often are outmoded before their publication dates.

This information explosion has made the tried and true technique of rote learning obsolete. Analysis, synthesis and so-called higher order thinking skills are imperative for today's children because they must be equipped to interpret and digest information which is not at hand today but may be commonplace tomorrow.

An example of this phenomenal change can be found in the students of the 1960s. High school students preparing for careers in this era scarcely knew the word "computer," but by the time they graduated from college, such technology had not only been introduced into almost every employment field, but also was finding its way into people's everyday life at home as well.

Given the dramatic increase in information and the changes it produces, how can teachers of the 1990s best prepare their students for future careers which may not yet be identified?

Set against this backdrop of a runaway knowledge base is the reality that today's workforce is less able to accommodate those students who are not successful in school. In times past, students who "didn't make it" in school, could often find sustained work in the blue collar ranks. Innovations in the workplace have translated into a need for more skilled

personnel, even at entry levels; consequently, school dropouts and those with insufficient skills are hard pressed to find jobs which can offer adequate support.

These labor force changes, coupled with the demands on schools to take on more responsibility for the moral development and health-related issues of youth, have thrust education into a more tenable and critical role than ever. Consequently, the traditional role of teachers as the primary delivery agents of education is acutely affected by such changes.

The empowerment of teachers must be defined in light of these realities. To what purpose are teachers to be empowered if not to better enable their students to negotiate successfully through the maze of challenges and formidable obstacles before them? Empowerment is not simply the giving or transference of authority, but also is supporting and making possible those conditions under which those with the authority can flourish and accomplish their purposes.

Given this meaning, teacher empowerment will require some significant changes in the now customary role and responsibilities of the teacher.

The Teacher as a Learning Facilitator

The seemingly boundless generation of information in today's world calls upon education to abandon the notion that the teacher is the fount of all knowledge who imparts his or her wisdom upon the students through lectures, reading and recitation. Teacher-dominated classrooms in which students are passive memorizers will not equip children with the capabilities to process and integrate information on their own.

Although certain skills and abilities can still be identified as basic to all learning, teachers will not be able to cover the length and breadth of subjects which are undergoing such rapid change. Therefore, the teaching focus must shift to developing students' powers of inquiry, discovery and problem-solving. Such a focus demands active student engagement and hands-on involvement. This means that "all the answers will not be found at the back of the book" either for the students or the teachers.

Teachers not only need different training in how to foster such thinking processes in their students, but also will need a degree of administrative latitude to exercise such training. Prescriptions for covering a certain number of skill areas or chapters in the text within a set period of time may be counterproductive or too constraining to a genuine effort aimed at developing students' analysis and synthesis capabilities.

Furthermore, education planners must recognize that if teachers are to concentrate their efforts on such teaching strategies, the jobs of basic skill remediation, drill and practice and even some aspects of diagnosis might be more efficiently accomplished through computer-assisted instruction or with the aid of a paraprofessional.

The societal changes in the information age also indicate the need for teachers to become "instructional developers." As students experience the world more and more in multi-sensory ways, teaching likewise needs to reflect and acknowledge students' responsiveness and receptivity to multi-media means of presenting knowledge. Lectures, pens and paper can no longer be the sole instruments of teaching if educators wish to engage students who daily experience life through a deluge of electronic sound and visual images.

Teachers need to be able to capture the powers of technology for teaching. Filmstrips and 16mm movies were the medium teachers were expected to master 20 years ago. Now, as computers, distance learning and interactive video wend their way into the classroom, the teacher will be called upon to sort through and use these innovations to engage their students. These developments need not be viewed as yet another burden upon teachers, but properly introduced, can be the means by which teachers find new success and rewards in their work.

Affording teachers the tools, training and flexibility to allocate their teaching strategies appropriately for their students is a true means of empowerment.

The corollary to this manifestation of empowerment, however, is that teachers must be willing and equipped to forsake the more lockstep teaching methods, to master the learning tools provided and to enthusiastically foster active student participation in the classroom — a job far more demanding than the traditional "sermon from the mount" means of transmitting knowledge.

The Teacher as Colleague and Manager

The isolation of teaching has been clearly documented. Unlike most professions, the teacher's job is almost invisible to one's peers. Secluded behind their classroom doors, teachers daily practice their craft with little observation from other adults. Indeed, many teachers have grown to view attempts to observe their work as intrusions, necessary evils to be endured a few times a year for the sake of formal evaluations.

Teachers often report little substantive sharing with their colleagues about instructional methods and teaching techniques, often adopting the view that what happens behind the classroom door is not only their business but their problem as well. Even in schools with departmental structures and regular faculty meetings, many teachers say meeting agendas tend to focus on administrivia, "housekeeping" details, or information passed down from higher management levels. Joint problem-solving is rarely the purpose of the interactions among teachers.

However, long before school-based management was coined as the latest trendy education phrase, countless schools with successful reputations had discovered one means to "empower teachers" was to draw upon their knowledge and skills collectively, to promote collegiality,

and to involve the faculty in the overall responsibility (if not the actual decision-making) of the school. Creative and strong principals and department chairs have long recognized the benefits of shared problem-solving and frequent, substantive interactions with faculty members.

As attempts at school-based management have emerged, these lessons about teamwork and participatory governance are being discovered anew. As a result, some aspects of teacher isolation are diminishing and teachers are more readily called upon to lend their voice (with varying degrees of authority) to decisions affecting their school. However, teachers appear particularly skeptical of innovations which either call for their consultation but never heed their advice or require their participation but never afford them additional time for their involvement.

Teacher empowerment does require the increased reliance on teachers to contribute to school decision-making. Teachers do need to have a sense of control over the environments in which they work. And with increased control, comes a deeper commitment to the goals of the institution and a shared responsibility for all its outcomes.

The means for that involvement can take several forms — faculty meetings, voting school councils, department structures, grade-level teams, etc. But, as the recent study on teacher working conditions by The Institute for Education Leadership reported, "For such forms of participation to be perceived as genuine by teachers, they had to believe there was an intent by the administration to use the advice solicited. If teachers regularly were consulted and if their input were respected and regularly used, teachers then perceived themselves as participating in decisions. When consultation was sporadic, however, or teacher contributions used selectively, the sincerity was questioned."

Furthermore, actions taken under the auspices of "teacher empowerment" must carefully consider the element of time. Giving more responsibility to teachers, even if accompanied by true authority, is not likely to produce the intended productive results if the new assignments are heaped onto the teachers' already overburdened shoulders. Involving teachers in a wider array of school functions also means affording them the planning and meeting time needed for meaningful participation.

The Costs and Benefits of Empowerment

The time required, of course, translates into additional costs as class loads may have to be reduced and scheduling adjustments made. Likewise, the training in teaching strategies focusing on development of students' analytical and problem-solving skills will carry a pricetag. And equipping teachers with the tools (technology and otherwise) so they might better direct their teaching skills also will have financial ramifications.

Teacher empowerment clearly is not free. It is also not simply a nicety to promote teacher morale. Empowerment means determin-

ing the role of the teacher in a more complex and swiftly changing society, and then finding the ways to enable teachers to be successful in that newly defined role. As such, the substance of empowerment goes to the core of the education process and is at the center of all efforts to help children lead productive, rewarding lives.

Teacher empowerment is about vesting control in those persons closest to the learning dynamics of children, but more importantly, it is about providing the encouragement, support, abilities and direction needed for those persons to carry out their all-important mission of preparing youth for the future.

EDUCATION REFORM: THE GOOD, THE BAD, AND THE UGLY A TEACHER'S PERSPECTIVE

Kim Natale

The eighties have been a period of education reform. The students graduating this year were in elementary school when all the talk about "reform" began. It seems that now is a good time to take a look and see the results of the changes. As then President Reagan stated in 1984, "Before this decade is out, Scholastic Aptitude Test scores should regain at least half the losses of the last 20 years."

The good news is that SAT scores have gone up about 14 points. The bad news is that they dropped 90 points from 1963 to 1980. Even worse, the number of students scoring at very high levels has dropped. In 1981 over 2000 seniors scored above 750 on the verbal section of the SAT. In 1988 only 986 beat that score. Beyond that, the federally funded National Assessment of Educational Progress (NAEP) reports that in math, "While average performance has improved since 1978, the gains have been confined primarily to lower-order skills . . . only 6.4 percent have mastered multi-step problem solving and algebra . . . this percentage has remained essentially constant since 1978." In the science report NAEP reports, "Only 7 percent of the nation's 17-year-olds have the prerequisite knowledge and skills thought to be needed to perform well in college-level courses . . . students in the upper range of science proficiency did not show any improvement — nor are there increasing numbers of these students."

The ugly part of this scenario is that per-pupil budgets in public schools have increased more than 25 percent above inflation since 1982. Although many studies stated that throwing money at the education problem would not help, that appears to have been the method of choice. And as predicted, it hasn't worked.

The problem is twofold and is getting worse as the "reform" movement continues. There is a severe shortage of quality teachers, and many of the teachers who are good are so restricted by poor administrators and regulations that it is impossible for them to do a good job.

Prediction No. 1

The shortage of quality teachers will continue because educators continue to believe that teaching is a science. When we believe it is a science, then university professors of education are able to find the "correct" way to teach. Each aspiring teacher can be "trained and molded" to fit the current educational fad. Unfortunately, this does not work.

When student teachers come to work with me, they are usually very curious about the teaching method that I use. They will ques-

tion me about the Hunter techniques that I have adopted. Or they ask if I use mastery learning, or the BASICS approach. Through the years I have made it a point to become familiar with these ideas so that I do not feel so foolish. However, they have not been influences on my teaching style. The style that I have works for me and fits my personality. I realize now that I use many of the techniques that are part of various methods, but I used them long before the methods were around.

As much as many people really hate to admit it, teaching is an art. A real artist is very different from a paint-by-number painter, just as a master teacher has a unique style that cannot be quantified. The scientific approach to painting would be a paint-by-number painter. It is more efficient and the product is more uniform. There is hardly any chance of painting a poor painting, so the risk to the employer of the painter is very low. The employer allows a technician to place the correct color in the correct numbered area. If the technician is doing the job correctly or incorrectly it is easy to evaluate the performance. Increasingly school districts seem to be evaluating teachers in a similar way. Administrators look for teachers who do what specific tasks they feel make good teachers. They check off the fact that learning groups are used, or lesson plans are complete. They keep track of mistakes in filling out attendance sheets. They monitor the deviations teachers allow from the dress code. All of these "objective" criteria become the basis of deciding if the teacher is doing a good job with students.

In spite of all these apparent advantages, most people do not have paint-by-number paintings hanging in their living room. Instead, they have, or would like to have, paintings done by an artist and not a technician.

In the same way, superior teachers are artists, and most people find it boring to sit in a technician's class instead of an artist's class. In viewing a variety of great teachers, a person will see a variety of techniques. What is really amazing is the way great teachers can take the subject and make it come alive. They generate excitement and exude a love for learning. They are doing far more than can be quantified. Most of their reactions are intuitive. They seem to be able to take the correct action without even pausing to think about what they are doing. These teachers are viewed highly by former students. These are the teachers former students remember with statements like, "She taught me more about life than anyone, and at the same time we learned Shakespeare."

Writing in *The Wall Street Journal*, Sept. 8, 1986, Irving Kristol stated, "Teaching is a talent, and very good teachers, like very good actors, are bound to be in a minority. There are 2,182,000 public elementary and high-school teachers in the U.S. From such a large population, the most one can reasonably expect is an average level of minimum competence. And on the whole, that is what we get."

Because the method of hiring teachers has really changed very little under the reform movement, there seems little hope that more "artist" teachers will find jobs. There are several trends that show a movement away from quality teaching. For example, it is popular now to view schools as a company with the product being the students. Administrators measure the productivity of the teachers. They have developed specific criteria that define "good teaching" and observe classrooms looking for these criteria. The teachers are scored on the number of the points they have made. Notice how similar this is to rating an artist by how many times he or she has painted the correct color in the numbered area. There are many schemes where the salary of the teacher is linked to these observations.

Prediction No. 2

There will be increased standardization, hampering teachers' ability to control their own environment.

There are many ways in which this increased standardization is appearing. Teachers are increasingly demanded to measure the quality of education through some "objective" means, and to use that means to form a judgment of the quality of instruction. The measure is usually some form of standardized test. For many years the Scholastic Aptitude Test and American College Testing Program scores have been used to judge the quality of high schools. Admittedly, this has not been official policy, but it has been used by the community and the higher scoring schools for this purpose. Other methods being used are the number of National Merit scholars, scores on achievement tests, Advanced Placement scores, and many other standardized test results. Other means should be developed to gauge quality instruction that do not treat a school as a factory with a product being produced. However, there is no movement in this direction.

The danger of improper use of standardized tests is the pressure that may be created for standardization of courses. The Council for Basic Education's *The Paideia Proposal* recommended that:

All sidetracks, specialized courses or elective choices must be eliminated. The course of study to be followed in the twelve years of basic schooling should therefore be completely required, with only one exception. That exception is the choice of a second language.

The movie "Stand and Deliver", based upon a true story, makes a great point about the necessity for individuality in the development of course material. In that movie the calculus teacher uses very unorthodox teaching methods to give the students self-confidence. He holds Saturday sessions and evening classes. He wants his students to learn, not just do well on a test. When the students finally take the advanced placement examination, all of them pass. This type of teaching is not fostered when all students are required to be in a class. The freedom the teacher had in this situation

was to tell the students they could leave, take another class, and have the easy route through life. Today teachers seldom have the freedom to teach in any other than the prescribed curricular method.

Prediction No. 3

Administrative support of teachers will decline, along with a continuing decline in administrative confidence in teachers.

Schools are moving away from placing confidence in teachers. In California after the passage of Proposition 13 the California Business Round Table convinced the governor to enact a major new education law. The state found \$2.7 billion of new funding for education in a two-year period. The legislation was over 150 pages long and prescribed exactly what textbooks to use, what subjects students should be taught, and the number of hours of instruction for each subject. In fact, almost anything that any teacher should be doing was spelled out in this document.

In an era where we are moving away from regulation of employees, there is no other occupation that even comes close to the amount of regulation that teachers are subjected to. California is not unique in this regard. In New York, the Regents Action Plan and the Part 100 Regulations that are designed to implement that Action Plan demonstrate the same lack of confidence in teachers.

Where are decisions being made to change materials used in schools, the curriculum, or the organization of the schools? More often than not, these are being made by people far removed from classroom teaching. These decisions are being made by principals, superintendents, school boards, state education boards, and even by legislatures.

The problem is that the people who govern schools believe their job is to have plenty of supervision over teachers so they can see who is good and who is bad. What is desperately needed is some freedom for our teachers to be involved in decision making. The teachers are the ones who know what works and what doesn't work.

In my own school district, which is regarded as one of the finest in the state, there has been a major push to implement a new "high tech" curriculum. The district has hired a person with no teaching experience to implement the curriculum. Each teacher who has carefully looked at the curriculum has recommended against its implementation. In spite of this, the school district has ordered that the course be taught in a "pilot" school. And the teachers in the "pilot" school have been told that no matter what their opinion of the course, it will be expanded to other high schools the following year.

It is this type of thinking that is destroying creativity in our teaching staffs throughout the nation. Teachers must be able to exert substantial control over their work environments. If they are unable to do this, they will not be effective teachers.

There has been some positive movement in support of the teaching environment that cannot be ignored. More teachers now have access to a phone and an office of their own. More are being included in personnel decisions and curriculum development. Surveys indicate that teachers increasingly feel more empowered. Unfortunately, these positive environments do not exist in most places. Where teachers are not supported, there will be little improvement in the student's performance.

As Albert Shanker has said so well, "(Teachers) will not work in a place where they are not trusted, where they are time-clocked, where they're supervised, where they're observed, where they are treated as people to be pushed around and instructed and regulated. . . . I am convinced that we will not attract the best and the brightest who are graduating today if teachers continue to be treated as they currently are, as workers in an old-fashioned factory who may not exercise judgment and discretion, who are supervised and directed by everyone from the state legislature down to the level of the school principal."

Prediction No. 4

The overall poor quality of the curriculum and the improper use of that curriculum will continue.

It amazes me that teachers are as creative as they are given the state of textbooks in this country. Our textbooks are currently a national disgrace. We have allowed them to be selected by school boards instead of by professionals. The school boards have little or no knowledge about what needs to be in a good textbook. So they adopt rules. They look for short, easy-to-read sentences that can make a book so dull no one would ever want to read it. There is a required inclusion of all ethnic references, along with racial and gender references so that no group is left out or offended. Naturally, evolution and creation must be dealt with as demanded by the courts.

There is no one who asks if students can learn from the textbook. Although there are defined, highlighted words on every page, no one even asks if students who have missed a class can read the book for the lesson. The number of illustrations is counted, but no one checks to see if the illustrations are captioned correctly or understandably. Every book must include questions, but those checking the questions have no idea if these are the questions that need to be asked or if they are at the appropriate levels.

Wouldn't it be wonderful to see a school board ask a teacher to stand up and demonstrate what is right and wrong about a textbook? Much like a doctor or a lawyer standing before a group of laymen to explain the fine points of a case, a teacher could be so respected that they could stand before a group and discuss a textbook.

Prediction No. 5

Teachers will maintain about the same level of pride in their profession as they have now.

In this nation, we must make our teachers feel important. Judy Reznik, one of the astronauts killed aboard the space shuttle Challenger when it exploded in 1986, was speaking to a group of teachers who were finalists in the "Teacher in Space" program. In June of 1985 she told this group that she was delighted to be able to speak to them because they were teachers, and they, "are important." This is not the comment that teachers are used to hearing.

It is very rare for people to look very pleased when they learn that I am a teacher. Comments like, "Oh, you're just a teacher" begin to harm the pride we have in our jobs. When I toured Ball Aerospace corporation this year, each person we spoke with showed an amazing pride in their jobs. When I asked the secretary what she did, I got a discourse on the important satellite that was being built that year. Another person was the cleaner of the "clean" room. His job was to make sure anyone entering had the correct garment, and that the clothing was laundered regularly. But when asked what his job was, I learned instead about the importance of the clean room to the functioning of the satellite. In too many schools, when you ask the same question of a teacher, "What do you do here?" the response is, "Oh, I am just a teacher." I look forward to the day when each teacher in a school is excited about the progress the students are making, and feels as if they are an important part of this progress.

A Dismal Picture?

Hopefully, this picture of public schools in the 1990's is too bleak. There are many small steps that have been taken to improve schools. The improvements have included recognition that some problems students face may be beyond present psychological understanding and behavior modification. Some teachers have been removed from the yoke of standardized curricula that still blinds so many. In a few places, teachers are supported as professionals and confidence is placed in their educational decisions. They have some control over the education process, especially what happens in their classrooms, curriculum adaptation and textbook selection. New curricula are being developed in which teachers have a wide variety of strategies to choose from, including some suggestions on how to develop their own activities related to the printed materials. Administrators, parents, and the community are finding more ways to recognize quality teachers and reward them. Recent studies, such as Metropolitan Life's ongoing "Survey of the American Teacher," show an increasing job satisfaction among teachers.

Sadly, in many schools the last few years of education reform have worked to place more yokes on teachers instead of fewer. There is no light at the end of the textbook tunnel. Their quality will continue to decline. There is little chance that teachers' unions will become anything more than protectors of mediocrity. If public schools do not have basic, fundamental changes, they will cease to be places where learning takes place and simply become a social service.

The Challenge

Public Education stands on the threshold of being the major force in our democracy. It is the only remaining institution that all Americans share. The church and home are no longer common experiences. We can either make fundamental changes and become the glue that America needs so badly, or witness the decline of our nation if we fail in our mission.

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REVOLUTION IN PEDAGOGY

Patricia Albjerg Graham

"Children born today face a double threat. They face the possibility that their families will be poor at least for some period even if they remain intact. And they face the possibility that they will spend part or all of their childhood in single-parent families, in which case they will very likely experience poverty along with whatever other hardships the situation implies. A declining minority will live their lives entirely in non-poor two-parent homes. The question yet to be addressed is whether our society and its social policy institutions recognize this fact." So writes David Ellwood in "Divide and Conquer,"¹ and he is describing all of us in the United States, not just some subset of children in American cities or the black, Hispanic, Native American or Asian minorities. The description applies to our children and grandchildren, as well as to those of our neighbors.

The query, whether our social policy institutions recognize this fact, is the issue upon which I wish to concentrate today. My answer is simple; they do not. The social policy institutions principally concerned with educating the young, namely our public schools and the institutions that prepare their professional staff of teachers and administrators, our schools of education, have not recognized this fact.

Our public schools remain organized on the principle that attendance and completion of a high school program is the goal of schooling. The effort is to keep children in school, but similar attention is not given to assuring that the time in school results in genuine learning of material that society believes is important for people to know. In short, attendance takes precedence over achievement. Making achievement the goal, not attendance, will require massive changes to address the issues that Ellwood discusses.

Keeping children in institutions that are not serving their needs is a fundamental disservice, both to the children and to the society as a whole. The children of the affluent, particularly those with both parents present, typically overcome this problem through supplementary activities, such as summer camps, foreign travel, museum expeditions, special music or other lessons, and homes filled with books, educational toys and monitored television viewing and discussion. Together these activities more than compensate for limited school curriculum, and the significance of them cumulatively has prompted many wise educators to observe the extraordinary power of nonschool education. These scholars are correct in pointing to the educational importance of these varied experiences.

In fact, many of the schools we judge to be "best," typically ones serving a predominantly affluent student body, incorporate these features in their regular programs: summer schools for the gifted, spring

term travel, field trips to the local science or art museum, extensive after-school extracurricular activities, well-stocked and accessible school libraries — or media centers as they are now called. Parents who have the financial resources to do so often make housing decisions based on the reputations of schools in offering these kinds of programs. Other parents, though only a tiny minority, choose to send their adolescent children away to boarding school, and the ones again typically regarded as “best,” such as the Phillips Academies or St. Paul’s, are ones that provide an immensely rich environment, both in the formal curriculum and in the informal ambience of the institution.

But the children of whom David Ellwood writes are not likely to be the ones who are sent to St. Paul’s or the ones whose parents can choose housing based on their assessment of the quality of the schools. Ellwood’s children — who are the majority of our young — are ones who will depend heavily on the quality of the public schools for the education they receive. The fact of the matter is that the public schools that will serve them are less likely to have well-stocked media centers, extensive extracurricular activities, organized school outings. They are much more likely to have limited curricular choices and even more restricted pedagogical practices. In short, there the routinized teacher question/student answer model will reign, supplemented by work books and drill sheets. The text materials will serve as the prime source of study, and the likelihood that the materials will be unimaginative and uninteresting is great.²

The effort to keep children in attendance in such a school flies in the face of the reality that being in such a place is both dispiriting and dull. That is true for the children, who are often truant and hence learn even less. It is also true for the teachers, who are also sometimes absent and who rarely remain the 12 years that we expect students to endure. In short, the schools that serve the children of families with restricted choices are ones that are likely to put a premium upon attendance and to regard significant achievement as an unattainable goal for most students.

This is not a new development. Schools serving children of the affluent have traditionally been more lively, imaginative, and interesting places than ones serving the children of the poor.³ The principal exceptions were at the turn of the century when manual training was introduced into schools whose students were not in their own minds or in the minds of their teachers destined for college. Then the curricular dullness associated with the conventional instruction was broken for these children, an innovation that John Dewey praised enthusiastically in “Schools of To-Morrow” in 1915 and in “Democracy and Education” the following year, laying the basis for the widespread adoption of the progressive education movement.

The followers of progressivism for most of this century have been relatively prosperous public schools and independent schools, institutions that have taken their clientele’s wishes and preferences seriously.

Those schools that have not been inclined or induced to respond to their clients' wishes typically have provided a half strength potion of whatever passed for curriculum at the time in their more prestigious neighbors' schools. At a time when the majority of adult women did not work outside the home and when there were still many unskilled and semi-skilled jobs available to men in urban and rural areas, the public pressure to provide a thorough and liberating education for all children did not exist.

To our credit in this country we have generally supported the unusual child of poverty, immigrant or native, white or black, to achieve the schooling for which he or she yearned, but we have not done so as a matter of policy for the much larger group who did not yearn for such an education. We excused ourselves by believing that "they did not need it." What is different about the present is that the society needs such education for all its members now. We cannot sustain either our economy or our democracy with the limited allocation of education that we are currently providing to our children. The history of education in the United States is replete with expansion of educational opportunity and offerings. It is not, however, replete with improvements in school instruction and with enhanced student learning.

Historically, we have increased academic achievement for those who either wanted to learn themselves or whom we have wanted to learn. We have not achieved similar successes either with those who did not want to learn or whom we have not believed needed to learn. The juncture that we have now reached is that the future of our society rests on expanding the definition of who needs to learn and on our finding the expertise with which to enable them to do so. Those are the children of whom David Ellwood writes, and we in schools of education with our responsibility for preparing school people are the social institution to which he alludes.

The dilemma, then, for the graduate school of education is to devise programs that will engage the faculty, whose eyes sometimes stray to their colleagues' definition of scholarship in the arts and sciences, and will serve the education profession by maintaining a creative tension between those practitioners in the field who wish to retain the status quo and those both in the field and in the university who recognize that the status quo cannot be maintained. The present changing social conditions, which David Ellwood describes, make maintenance of the status quo untenable. This dilemma is a good one for schools of education.

First, it makes clear that unlike some academic specialties, education is clearly vital to the functioning of our society. In education there is no doubt that we are engaged in useful and important work.

Second, the work is intellectually challenging. The task that we face in education is redefining and reorganizing what we believe our entire population needs to know and then figuring out the means by which they can learn it. The organizational aspect of this problem alone makes the

problems of American industry pale in comparison and gives us a greater appreciation of the Soviet people's task in perestroika.

Third, we face the ultimate integration of the unity of theory and practice. Schools of education are not the sole, designated institutions to make changes in education. Rather, they function as clearinghouses, generating new ideas and practices and, in conjunction with sometime enthusiastic and sometime reluctant practitioners, attempt to bring about improvements in learning. But these changes will not come if only the profession is involved; the nonprofessional public must also support them.

Hence, the relation between schools of education and the education profession must also include involvement with the public. That involvement cannot be merely tacit, nor can it be only with the educational needs of the participating public's children. Rather, it must be a dynamic commitment to the improvement of education for all the children of the society, both for their benefit and for the society's. That kind of public support of education would be new in the United States. Thus, the tasks for schools of education are socially vital, intellectually challenging, and require a complex unity of theory and practice involving all segments of the society. What more could we want?

What we want and what we need is better support — intellectual, societal, and fiscal — for what we do. That support, however, is unlikely to be forthcoming unless we can articulate clearly what we believe are the most promising routes to improvement in education. Let me offer the following proposal as a key for schools of education to unlock the puzzle of educational improvement: we must foment a revolution for better pedagogy.

Why a revolution in pedagogy?

First, emphasis upon pedagogy unites the notions of the students' and the teachers' joint responsibility for learning. Although learning can take place with little intervention from the teacher, it can be enhanced — and should be enhanced — through the teacher's efforts.

Second, emphasis upon pedagogy implies that there is a body of knowledge, skills, and values that needs to be acquired and that there may be various means to acquire it but that everyone needs it. This idea is in direct contradiction to current educational policy, which is based on the "good" students getting one curriculum and "poor" students getting a watered down version. Education is a vintage wine, one that is damaged by adulterations.

Third, emphasis upon pedagogy requires fundamental organizational changes in schools, ones that will give primacy to the role of instruction and secondary importance to the many other nonacademic activities in which schools now engage and which often assume greater significance in the eyes of the administrators, students, public and perhaps even the teachers than does instruction. Such organizational changes will require much greater expertise of teachers but will also place much higher value

upon their efforts. Both would be major changes.

Fourth, emphasis upon pedagogy suggests that school sites are vital for their instructional role, but permits the inference that effective pedagogy can occur in a variety of settings. It places schools in a key role, as they should be as a matter of public policy, but allows one to look to other sources of stimuli to learning.

Fifth, and finally, emphasis upon pedagogy is a universal educational value. It is as important for the highly-motivated, able child of devoted parents as it is for the unmotivated, slow child of estranged parents. Since present educational arrangements and values tilt toward supporting the former child more than the latter, it is vital to have an encompassing goal that benefits both.

The argument for a revolution in pedagogy rests on the premise that the principal educational goal for children in schools is academic achievement. This is not the principal goal for children, mind you, but only for the more narrow but significant and universal experience of children *in school*. Since our schools of education are specifically committed to improving the practice of education, then we must attend particularly, though not exclusively, to students' institutional educational experiences.

Why should our society place such a premium on academic achievement? Because the knowledge, skills, and values that come with academic achievement are inherently valuable as students seek adult roles in the society. Mastering such material gives students an introduction to the world and its mysteries, as well as some tools with which to explore both their potential and the world further. It allows young people to benefit not just from the limited experiences that inevitably they have had but rather to learn vicariously, thus expanding enormously their narrow range of direct experience. The parts of the world the students may wish to explore are their choice. Their achievement must be comprehensive enough, however, that they understand the range of explorations that are available. A solid foundation of academic achievement that will permit a maximum of personal and vocational choice in adulthood would serve well both students and the society.

Academic achievement for all students is also valuable because schooling is the common experience of all U.S. children, and success in school, therefore, is very important to the development of these youngsters' self-esteem. When our children fail in school, either directly by not passing courses or indirectly by passing from one class to the next but without significant learning, then the development of self-esteem is likely to be severely jeopardized. We need to assure that our children are truly successful in school, that we provide the varied conditions that will allow each to be a genuine success. Since schooling is, ostensibly at least, about learning, then we need to find the circumstances that will allow the child to learn and to learn that which we believe everyone needs to know. That learning is the es-

sence of academic achievement, and that is the universal accomplishment we seek for our young. The achievement will come at different rates and in various forms, but our task is to make sure that it occurs, for it is liberating for the individual both intellectually and personally, and necessary for the society politically and economically.⁴

While there are strong reasons FOR academic achievement, there is compelling evidence that the LACK of academic achievement is also deleterious both to the individual and to the society. We find among youngsters who display personal and social difficulties an alarming rate of low academic achievement. For example, young adults (18-23) scoring in the bottom fifth on tests of academic skills are nearly nine times more likely to have dropped out of schools or to have become a parent than their peers who scored in the top half of the tests. Similarly, they were five times more likely to have been arrested during the previous year.⁵

Undoubtedly, most of these individuals are inherently capable of learning to read, but under the present educational arrangements they have not learned to do so in school. This lack of achievement contributes to diminished confidence in oneself and in one's ability to function smoothly in this society. This loss of confidence sometimes translates into diminished effort and likely diminished participation in the legitimate economic and political life of this country.

The members of the emerging underclass of which William Julius Wilson writes so compellingly in his recent book, "The Truly Disadvantaged," are a group who do not have high levels of academic achievement. No responsible social analyst would argue that their problems would be solved by higher reading rates alone, but all would agree that their low reading rates — and the schools that required them to attend but failed to teach them effectively — contribute to their problems. One might add that the schools of education that failed to prepare the teachers and administrators to reach the children, and which have failed to develop a concerned public demanding better schools for these children, are responsible as well for these difficulties.

What we believe the most favored citizens in the society should know is precisely what the least favored children in the society must be taught and must learn in school. That is why we need a revolution in pedagogy. We have concentrated our concern for the least favored by trying to keep them enrolled, but we have not exerted ourselves intellectually or institutionally to help them to acquire the same competence in academic subjects, work habits, and values that we have sought for the most favored.

Occasionally when the schools have failed with the most favored children, their efforts have been supplemented by other agencies in the society. The characteristic of the least favored is that they have few other beneficial supplements beyond those provided by the schools. Pedagogy, therefore, is more important for the least favored than for the most favored.

There are more of the less favored children now than there used to be, as David Ellwood points out, and the expectations both for the most favored as well as for the less favored have risen significantly. That is why our schools need to improve and why our schools of education need to play the leading role in bringing about that improvement through a revolution in pedagogy.

Let us look now at some specific steps that schools of education must take to foment the revolution in pedagogy.

(1) Accept the obligation that a professional school in a university must be in a creative tension with the profession it serves and, especially, with the institutions in which the professionals labor. In the case of education, that means that schools of education have a primary obligation to prepare educational professionals, most of whom will work with schools. No one would argue that schools of education should adopt the narrower title of "schools of schooling." Rather, they should recognize the broader responsibility to advance education, in general, while attending to issues of schooling, in particular.

Such commitment on the part of schools of education needs to reflect not only the expertise of faculties of schools of education, but also the craft knowledge of experienced practitioners whose insights ought to inform and improve many aspects of research and teaching on university faculties. Collaborative efforts of this kind are not easy to achieve, both because of the status differences between university and school personnel and also because of the different organization of knowledge in school and university settings.

As Susan Florio-Ruane has observed in reflecting upon an effort of university-based researchers and school teachers to discuss jointly problems in the teaching of writing, "in a social world that is unequal, you don't get a democratic or open conversation simply by saying that everybody's free to talk."⁶ Similarly the "reflection-in-action" that Donald Schon describes as characteristic of a skilled practitioner is alien to most research designs that university people find acceptable. As Schon notes, "Often we cannot say what it is that we know . . . Our knowing is ordinarily tacit, implicit in our patterns of action and in our feel for the stuff with which we are dealing. It seems right to say that our knowing is *in* our action. Similarly, the workaday life of the professional depends on tacit knowing-in-action."⁷

Florio-Ruane calls for university researchers to exercise "leadership" in their efforts to engage with school people to find ways to improve educational practice. Her sensitive use of "leadership," however, can succumb to an attitude of condescension, which she would deplore, in less gifted hands. Schon's broader definition of knowledge which includes that of practitioners which is not codified by the same rules as researchers challenges fundamental canons of the university community, particularly the traditional line of basic/applied research and development.

We in education have challenged that linearity for years, acknowledging that many insights from practice add to, supplement and re-

vise theory, but we have had great difficulty incorporating them into our courses and our writing, and hence into what we really believe. We continue to search for our Rosetta Stone of principles that can be taught to beginning teachers to allow them to apply in their practice. The collaborative inclusion of practitioner and scholarly knowledge into a unified body of knowledge still eludes us, but the quest remains an important one.

Ultimately our issue is to develop pedagogical skill, not simply pedagogical knowledge. Our enterprise is based on the premise that knowledge contributes to skill; hence, as we seek knowledge from various sources, we must remember that the seeking and codification of knowledge are not enough. Rather, educators must incorporate that knowledge into action and transform it into skill. Faculties of schools of education need to assist that transformation through their research and teaching.

(2) Recognize that the principal role of schools is instruction in academic subjects. If this instruction is to be successful for all students, then the pedagogy must be revised. Hence, programs in schools of education preparing educators should reflect that reality. The amount of time that is given in most schools of education to issues related to the improvement of student academic learning is modest at best. It is nearly nonexistent in the training of school administrators, hence giving them the implicit, if not explicit, notion that their management of a school need not deal with academic issues. Since future administrators are more likely than teachers to enroll in advanced graduate studies, the doctoral programs need to reflect substantially more attention to enhancing student learning.

Commonly those matters are left to the lower status teachers, whose working arrangements are typically prescribed by union contracts, which historically have not placed a high priority on teachers' skill in imparting learning to the young. Thus, an administrator is "promoted" from teaching to administration, thus leaving behind any genuine responsibility or involvement with what ought to be the main business of the institution.

Many educators today have not accepted the primacy of academic instruction in schools, nor do the actions of many school boards or parent groups appear to accept that responsibility either. All want high pupil test scores, but few appear to know how to mobilize public pressure, organizational commitment, and professional expertise to achieve the desired learning for the young. Managing institutions in this environment of ambiguous goals and ambivalent actors is taxing indeed. Programs in schools of education intended to assist educators in these ventures must focus upon the need for the students to learn and then upon the institutional changes that will be necessary at the building, district, state, and federal levels to make that learning more comprehensive and more likely. Understanding the contemporary and historical contexts of those educational and political dilemmas is a help in resolving them.

(3) Develop research and training programs for teachers and administrators that bring together persons who understand something of how individuals (both students and teachers) learn and develop, with those who understand the influence of the social and cultural context on learning and development. In the world of academe, that means individuals steeped in the insights of cognitive or developmental psychology, sociology, or anthropology, who are drawn together by their common interest in improving education and their commitment to the solution of educational dilemmas through varied insights and efforts. This requires more than the conventional educational psychology or developmental psychology or foundation courses for certification. That paper requirement lets both students and faculty off the intellectual hook. Rather, both students and faculty need to understand the relationship between the individual's reluctance or propensity to learn, and the role of the teacher and the school in making learning more likely. As we have come to understand over the years, learning is influenced enormously by cultural, developmental, and motivational factors; it is not simply a narrow matter of native IQ.

Much interesting work is now being done in cognitive science that could affect our understanding of how people learn and hence how they should be taught. Much of this work currently has few direct applications to learning and teaching, however, although Robert Glaser has collected and commented upon some promising efforts in relating the findings of cognitive science to improved instruction in school subjects.⁸

(4) Integrate pedagogical considerations with curricular ones. Good teaching depends heavily on vital and evocative material to be learned. Much of the current emphasis in school instruction rests on a simplification of basic academic material on the assumption that only such simplified material can be taught to everybody. What is left is dull beyond human belief, and the range of pedagogical expertise typically utilized to force this into the heads of the young is narrow indeed. Sometimes in an effort to be scientific in our analyses of learning, we have so miniaturized the cognitive tasks — in order that we could understand and measure them — that we have lost the overall point of cognition. The miniaturization, often undertaken in the name of testing and accountability, limits the teacher's pedagogical options, leaving a pedagogical straitjacket that controls learning but does not inspire it. It is also bad for teachers, as Andrew Gitlin has noted: "Teachers are alienated from their work process because the primary tool they use to shape education experiences for students is no longer theirs. Teaching as curriculum management deskills teachers, while putting a premium on clerking skills needed to make certain each student moves efficiently along a predetermined path."⁹

Reading should be fun, provide useful and usable information, and bring excitement. Reading exercises are a necessary preliminary step in instruction, no doubt, but they should not be the end of the school's

reading instruction or of the school of education's program to aid reading instruction. Curricula based on word recognition and comprehension that are ascertained solely through multiple choice responses to queries about reading brief paragraphs deprives both the teacher and the student from ever discovering the transcendent joy of utterly losing oneself in a book, and often a book that has been enjoyed by others so that the delight of the story can be revisited in conversations with those who have also liked it. Who ever heard of an animated discussion of paragraphs designed to develop reading power? "Treasure Island," though, is another matter. The task for schools of education is to develop strategems that will allow all children to read, understand, and enjoy books, not just answer the questions on paragraphs correctly.

(5) Develop instructional materials that are learnable, teachable, and worth knowing, as well as the pedagogical strategies that will make them known to a wide variety of students. Much of what passes as curriculum in schools serving less advantaged children does not meet these criteria. Curricula are deeply political in the best sense. What we believe is important to know changes over time. The history of western civilization deposed ancient history as the standard history course only in this century. Henrik Ibsen and August Strindberg entered literature curricula between the world wars, about the same time that significant numbers of Scandinavian Americans began to attend high school and college. Similarly Richard Wright and Langston Hughes have entered more recently, and Carlos Fuentes and Gabriel Garcia Marquez are new entrants. A glance at the "general knowledge" section of the Army Alpha test designed to identify potential American officers in World War I would shock many of us with the trivia that generation believed was worth knowing. Undoubtedly many of our achievement tests will similarly shock and amuse our descendants.

We teach our culture and society's values, and we teach according to what we believe is the student's destiny. This phenomenon has been most evident in our vocational courses, which for many years taught girls one set of skills and boys another. It is also subtly evident when we fail to teach the non-college bound population about difficult material, often cultural, that we believe they do not need to know.

Adults' absence of knowledge of some parts of the culture that are valued often makes them feel stupid and unhappy. In Tom Wolfe's "The Bonfire of the Vanities," Maria explains her glum mood as the result of her conversation with her seat mate on a trans-Atlantic flight who found her ignorant of Christopher Marlowe and Doctor Faustus. "Sherman," she says, "tell me the honest truth. If you don't know who Christopher Marlowe is, does that make you stupid?"¹⁰ Schools that deprive some students of this material while providing it for others — under the rubric of such choices being for the best for the students — make an incalculable error. Their students are not stupid, just uninstructed, but many feel stupid.

The schools of education, therefore, have the daunting task of helping teachers and administrators devise means to provide broader and deeper academic instruction through diversified pedagogy. The traditional formula in junior and senior high schools has been to reduce the academic content for those who did not appear to be academically inclined while increasing it for those who appeared to like it. Such decisions make it ever more likely that the academically oriented ones will become academically ever stronger and the weak ones weaker.

If a high school student who is good in English, for example, can choose among journalism, creative writing, speech, drama, or media presentations as supplements to his or her traditional Grade XI English, then it is quite likely that the student's command of the language will increase. As the junior progresses through the high school courses in these different though related subjects, he or she will doubtless encounter some rather different teaching approaches. The student who is poor in English, however, will likely not choose electives related to English and will take a minimalist course that is not likely to provide alternative morsels of instruction designed to tempt the jaded palate of the unenthusiastic English student. Rather, the poor student will likely be taught less of the subject in a more proscribed pedagogical manner.

That situation needs to be changed: the student who is doing poorly in a subject needs to spend more time on it in a more pedagogically imaginative way. Less time and less variegated pedagogy spell less learning.

Most schools of education focus their efforts on helping teachers deal with academically deficient students with remedial activities that are deeply boring and dull. The imaginative pedagogical approaches are too often reserved for the children who have already shown that they are motivated to learn and are concentrated among those in the "gifted and talented" group, the high scorers on normed achievement tests, or the Advanced Placement classes. These students benefit, of course, from the pedagogical variety, but their low scoring colleagues need it even more so.

The traditional teaching approach has been to expect students to adjust to the teacher's pedagogical style. Teachers, however, are supposed to be professional, and it should be their duty to adjust to the children's learning styles. Thus far, this has usually meant segmented, direct instruction for the slow learners and more open-ended, investigative instruction for fast learners. Thus, according to Lanier and Little, "schools inadvertently contribute to the limited cognitive flexibility that children from economically disadvantaged homes bring to school."¹¹ The task, then, for schools of education is to recognize this "inadvertence" and to prepare educators not to contribute to it but to alleviate it. To do so would be to respond to David Ellwood's initial challenge.

Thus far, I have argued that schools of education need to foment a revolution in pedagogy. The basic argument rests on the proposition that schools of education must maintain a relationship of creative tension with the profession they serve, recognize the fundamental instructional role of schools, develop cross-disciplinary investigations of learning, integrate pedagogical considerations with curricular ones, and develop effective instructional materials and pedagogical strategies. Such would be a revolution and would place those responsible for pedagogy at the center of it. Their task would be to assure that the students learn valuable material.

What I have NOT done, and deliberately so, is state the pedagogical strategems I believe are most useful or include a model curriculum for widespread adoption. Rather, I have emphasized that the task before us is to assist schools to enhance children's learning and development. Hence, I have stressed a revitalized commitment to pedagogy intended to achieve these ends. Pedagogy and curriculum are complexly intertwined. Any specific curricular recommendations are inevitably products of our culture and time, and appropriately so. Therefore, my curricular recommendations are not encompassed in a single, enduring list. Whatever the most favored children in the society are expected to know is what the public schools need to teach. Clearly such a definition includes what we think of as the basic skills, but it also includes the complex ones as well, which are the ones most frequently left out of schools' programs for the children about whom David Ellwood writes. That is the essence of the necessary revolution in pedagogy.

Schools of education, as a group, currently do not place a major emphasis on pedagogy, either their own or as a focus of their programs. Nor do most give substantial attention to the integration of pedagogy and curriculum or to the development of effective instructional materials. Hence, having schools of education develop programs along these lines would be a major shift for many of them. Nonetheless, there are some promising and compelling developments in many of our schools of education that relate to these issues, and in conclusion, I want to comment briefly upon three of them as indicative of some of the new work our colleagues are undertaking that, in my view, will help foment the needed revolution in pedagogy.

First, Lee Shulman working with a group first at Michigan State University, and now based at Stanford, is developing some important ways of determining how teachers themselves acquire "content knowledge," which he believes is of three kinds: subject matter, pedagogical, and curricular. Unless and until we know what teachers know and what they don't know, it will be very difficult to help them develop strategies to impart such understandings to the young. Shulman is eloquent on the matter of the inseparability of curriculum and pedagogy, how the two must be understood together. He is also insistent that we engage in sustained and rigorous re-

search on teaching rooted deeply in the context of teaching: "It is thus the ecosystem of learner, classroom, teacher, school, and community that serves as the theoretical ideal unit of inquiry for the interpretive researcher."¹²

Second, Lauren Resnick at the University of Pittsburgh is one of several who is writing compellingly about the content of the school curriculum. Her emphasis is upon its isolation. She notes the isolation of the learner as an individual without group support for investigation or without the use of tools (calculators or maps) to solve problems. She is also concerned about the isolation of what is being studied, how it is not embedded in reality. She does not argue that school should imitate life, but rather should adopt certain modes of learning from nonschool life that seem effective. Reviewing programs in teaching higher order thinking skills, she notes three in particular: "(1) socially-shared intellectual work . . . organized around joint accomplishments of tasks, so that elements of the skill take on meaning in the context of the whole; (2) elements of apprenticeship . . . make hidden processes overt . . . encourage student observation and commentary . . . allow skill to build up bit by bit, yet permit participation even for the relatively unskilled, often as a result of the social sharing of tasks; (3) the most successful programs are organized around particular bodies of knowledge and interpretation — subject matters, if you will — rather than general abilities."¹³

Third, and finally, Howard Gardner at the Harvard Graduate School of Education makes a provocative case for a new look at assessment. He is very critical of existing testing modes that measure "second-order symbolic knowledge" rather than either "first-order symbolic knowledge" or "practical knowledge." In short, what we can answer in the fraught but limited setting of a multiple choice test has been assumed to be both what we knew and what we could do about a problem. Gardner believes that is not so, arguing, "I therefore call for assessment which is 'intelligence-fair' — which looks *directly* at an individual's skills in an area like music, spatial knowledge, or interpersonal understanding, rather than doing so through the 'window' of linguistic and/or logical-mathematical prowess."¹⁴

If one agrees with Gardner, and I do, that "the line between assessment and curriculum has become almost invisible," then how we assess will determine what we teach. The revolution in pedagogy, then, becomes imperatively interwoven with these concerns exemplified by Shulman, Resnick, and Gardner. Who could ask for more compelling and vital times for Schools of Education?

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Notes

1. David T. Ellwood, *Divide and Conquer: Responsible Security for America's Poor* (New York: The Ford Foundation, 1987), p. 12. David T. Ellwood, *Poor Support: Poverty in the American Family* (New York: Basic Books, Inc., 1988).
2. Judith E. Lanier and Judith W. Little summarize some of the research on this subject, reporting that "a body of literature exists to suggest that schools reinforce the cognitive flexibility of those from upper class families but fail to change the conformist, other-directed thinking of those from lower class origins" in their chapter, "Research on Teacher Education," in Merlin C. Wittrock, ed., *Handbook of Research on Teaching*, Third Edition (New York: Macmillan, 1986), p. 534. They extend this line of argument to explain the difficulties of teacher education programs, which attract disproportionately from academe students and faculty from lower-class origins.
3. Jean Anyon documents these differences in great detail in "Social Class and School Knowledge," *Curriculum Inquiry*, Vol. 11, No. 1 (1981), pp. 3-42.
4. Patricia Albjerg Graham, "Achievement for At-Risk Students," in *School Success for Students At Risk: Analysis and Recommendations of the Council of Chief State School Officers* (New York: Harcourt Brace Jovanovich, 1988.)
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TEACHER LEADERSHIP IN REFORMING EDUCATION

Sherleen Sisney

In the 1990s, our economy and society will continue to shift from an emphasis on the production of goods to a more service-oriented, technologically complex socio-economic system with a student population having a significant number of at-risk children. Education must shift its emphasis to accommodate these changes. The answers to how students learn must be more specifically determined and implemented in a replicable model in order to meet the challenges of a more complex society. To accomplish this goal, the following premises must be considered:

1. The current "delivery-system" of education was structured to meet the challenges of an economy that changed from an agrarian to an industrial base.
2. The shifting U.S. economy, coupled with a rapidly increasing and ever changing body of knowledge, now requires that students from varying backgrounds develop skills to become life-long learners and problem solvers — i.e., capable of applying thinking skills to all life's situations.
3. It has been shown that students can be motivated to learn, regardless of their family background, individual initiative, or measured ability.
4. Previous educational reforms have been directed toward improving and insuring teachers' knowledge of subject matter, finding methods to encourage and reward superior teacher performance, and increasing standards for student performance.
5. The challenge now facing teachers, as well as the administrators in our school systems, politicians, and educational interest groups is to define, to provide a means of assessing, and to communicate the key ingredients for making students effective problem solvers and life-long learners.

Industrialization enhanced the role of education and led to the development of the high school, as well as the expansion of institutions of higher learning. In times past, the amount of knowledge necessary for most jobs and careers could be condensed into a limited number of years of formal education and required little continuing education. Historically, only a small percentage of society needed in-depth knowledge of specific subject areas and the skills to allow them to become life-long learners. Those who pursued advanced education were primarily from home environments that supported and enhanced their learning or, in exceptional cases, were somehow motivated to overcome their environment and to make the preparations and adjustments prescribed by the current system.

As labor-oriented jobs are replaced by service-oriented and/or more technologically complex jobs, students previously labeled "drop-outs" become labeled "at-risk" because of the new educational demands of the workplace. Today's work force will require the learning skills to effectively adapt to changing or new bodies of knowledge. This places less emphasis on acquiring and storing knowledge, and more emphasis on becoming continual learners.

A projected segment of approximately 40 percent of the Class of 2000 will come from lower income and less educationally oriented families. This segment will have to acquire the skills to assimilate and apply knowledge independently in society. Furthermore, some estimate that as those students enter the job market, they will be trained and retrained as many as seven times during their working years. Teachers must recognize and know how to give students from all backgrounds the skills to become life-long learners if they are to adapt to the changes they will face. The focus of education must move away from viewing students as receptacles of data. Instead, students must be given a foundation of learning and thinking skills that enable them to become problem solvers.

Widely publicized success stories have shown that disadvantaged students will dramatically improve achievement when the learning environment both enhances student self-esteem and offers different ways to learn. Despite these results, the educational system as a whole is still mainly directed toward a mass production, assembly line approach to education that was successful in another socio-economic era. In light of our failures and in consideration of the changing nature of our economy, we now have to ask why our educational system has failed to respond to these obvious changes.

To date, the movements to meet the current crisis in education have viewed the teacher as an object of reform rather than as a vital factor in shaping solutions. Reform efforts have focused primarily on improved teacher and student performance in such areas as raising standards for teachers, experiments in linking teacher salaries to responsibilities and performances, lowering classroom size, improving student scores on standardized tests, and lowering drop-out rates. Without the answer to the key question of how students learn, these reform measures can only provide limited improvement.

In the current reform effort, the emphasis on teacher empowerment and more localized management and decision making recognizes the key role of teachers in determining how students learn. Teachers are being asked to help make and assume responsibilities for decisions that prescribe the learning environment, the instructional methodology and content, as well as means for assessing student learning.

In this necessary experimentation stage, teachers should be involved in the risk taking and possible failures that inevitably accom-

pany finding the best solutions. With such responsibility goes accountability as well as the reward for the results. Teachers will be integrally involved in decisions that may even impact salaries and jobs. With increasing regularity, the success of teachers will be linked with the performance of the students.

The traditional role of teachers in the educational process has made them uniquely equipped to help face the challenge of expanding and applying the knowledge of how students become life-long learners and problem solvers. Teachers have had to relate to students on an individual basis and to be more pragmatic or realistic in reaching desired objectives because of that proximity. The problems posed by students with varied backgrounds and the changing educational demands of our society give teachers a vested interest in finding some concrete, transferable answers. In the reform efforts of the 1990s, teachers will play a vital role in determining the critical answers concerning how students learn.

The emphasis of education must shift from the teachers and the "system" being dispensers of knowledge to the student. We must recognize that the amount of knowledge and information acquired by a student in any particular subject is secondary to the ability to use it. The accumulation of knowledge must become the necessary by-product of the student's acquisition of the thinking skills which are prerequisite to practically and creatively using that knowledge. It is only with this shift of emphasis that we will experience dramatic changes in the "delivery-system" of education.

USING CURRENT TECHNOLOGIES IN EDUCATION

Joan Ganz Cooney

As the United States nears the 1990s, all Americans who care about our children's education have to draw a deep breath. We face an enormous challenge that we absolutely must meet in the next 10 years. Today, according to our own Department of Education, American schools are stagnating. Three out of every 10 elementary school children — virtually a third of an entire generation — will never finish high school. By the year 2000, unless we make radical improvements now in how our children learn, the proportion of dropouts will jump even higher.

Furthermore, a majority of our children who do stay in school are in deep trouble. In every basic discipline — reading, writing, mathematics, geography, science — they lag behind their counterparts in other countries, including some of our major industrial competitors like Japan and West Germany.

Dropouts or graduates, when our children leave school, they will try to find work in an increasingly complex and competitive world that is sure to find a large number of them wanting. Too many will not qualify for even the most basic jobs. Our children embody our future as a nation, and if we lose them to ignorance, that future is in jeopardy. Our scientific and technological edge will pass to better educated societies, and the idea of American know-how will become a quaint anachronism.

Back in 1816, Thomas Jefferson wrote a letter of advice that modern American schools badly need to reread. "Institutions must go hand in hand with progress," he wrote. "As new discoveries are made, new truths disclosed and manners and opinions change, institutions must also advance and keep pace with the times."

While the challenge confronting educators grows more pressing every year, most schools have not kept pace. Classrooms today still look very much as they did when I was in school. And most teachers go about their work just as their predecessors did. But it is not too late to grasp progress' hand, as Jefferson recommended — to take up on our children's behalf some of the powerful tools with which our ingenuity has already equipped us. It is high time we put today's — and tomorrow's — technology to work in *every* classroom.

If we rely on statistics, we might think that this bright new day has already dawned. They tell us that over 90 percent of schools have at least one computer and one television set and videocassette recorder, or VCR. Moreover, at least two-thirds of American homes now own a VCR, which means that many teachers and students can tape and save useful programs they see at home.

Actually, the schools' figures are not very cheering, because they ought to be much higher: surely every child should learn to use a computer, which means we need many more computers in our schools, and every classroom should have a television and VCR. Part of the reason they don't is, of course, cost. (But to keep the cost in perspective, it should be noted that a private entrepreneur recently offered to equip every high school in the country with TV receiving equipment at an estimated initial capital cost of \$500-\$750 million — not a total beyond reason in an era of trillion dollar federal budgets.)

Beyond the issue of cost, our society still remains deeply ambivalent, if not downright hostile, towards technology in the classroom — especially television. Many of us may uneasily admit that we are much less comfortable with computers than our children, bred on videogames, seem to be. Yet we readily agree that computers have a legitimate place in education. Consequently, most discussion of technology in the classroom spotlights computers, and neglects television, even though it is far cheaper and more accessible than computers.

Why are we so inhospitable to television in the classroom? First of all, I think it is because so much television programming is terrible by almost any standard. Most television is, at best, a thief of time — and we know much of it is worse. Second, many parents and teachers do not want schools to teach with television because they worry about the mounting hours children spend in front of the TV set when they're not in school.

These critics are assuming that as far as young viewers are concerned, watching any kind of television program is the same experience. This is simply not true. Suppose our children devoted the hours they now spend on TV to comic books instead. No sensible parent or teacher would argue that, therefore, youngsters should not read while they are in school. Yet that is precisely the argument most of us make about television in education. Kids watch too much at home, so it shouldn't be used in schools.

We adults may turn on our TV sets every evening to find out what has happened in the world, and to form our opinions about the day's important events, but we rarely conceive of television as a way to educate and inform our children. That means that we are allowing one of our foremost educational resources to stand idle, its potential largely unexploited.

Most educators still don't conceive of television as a tool that can fuel their ability to inspire their pupils, and may make at least some subjects seem more relevant than any textbook can. Does anyone seriously doubt that television can make geography lessons clearer by *showing* pupils the region they are studying? Or that television may help children grasp the drama and complexity of history by bringing it to life?

Recently a mathematics teacher in Bozeman, Montana, asked her fourth graders to write out their definition of tessellation — a term that's unfamiliar to many adults. She gave them no clues at all. Some children guessed "math test," because they knew they were having a math lesson. Then, without any particular explanation or introduction, this teacher showed her class a song sequence about tessellation from SQUARE ONE TV, Children's Television Workshop's (CTW's) math series for 8- to 12-year-olds, and asked them to try their definitions again. "This time they all got it right — without my saying anything," she reported. "Information seems to stick in their heads if it's in a song." Yes, a song they heard on TV.

This teacher's school owns only one VCR. Luckily, she has one at home. So she was able to watch SQUARE ONE TV with her young daughters and use the series as flexibly as a textbook — picking out segments she found useful, referring back to them later when she wanted to glean ideas for her classroom. New technologies such as videodiscs and TV-computer hook-ups, just beginning to appear in schools, will save time and make television even handier for teachers.

But I think there is yet another reason why most teachers and parents continue to overlook television. We forget that good education means more than formal instruction in class. So we ignore how much we've learned recently about television's ability to teach children *outside of school*. One thing we know today is that children don't sit hypnotized in front of the set. Instead they actively try to connect and make sense of what they see and hear. If a program is properly designed to appeal to and teach children, as some certainly are, we know that young viewers do learn from television.

CTW's own research has found that SESAME STREET has succeeded in teaching its target audience of 3- to 6-year-olds the basics of reading, arithmetic, and a wide variety of other subjects — as well as cooperation and other skills that help them adjust more easily to school. And a recent study from the University of Kansas demonstrates that infants as young as 10 months learn fundamental language skills from watching the series.

Besides real skills and information, television can actually encourage children to seek out more knowledge, in or outside of school. READING RAINBOW and other children's reading series regularly boost library circulation and sales of featured books. After watching 3-2-1 CONTACT, a science series we at CTW produce for 8- to 12-year-olds, 60 percent of young viewers surveyed do something to learn more. They read a book about science; they try an experiment; they visit a library or a science museum; they point out something new the series taught them. "I never knew that before!" they exclaim excitedly.

As informal education, television works impressively well. At its best, it can complement and supplement school and homework.

Even if television cannot reach most of our children in school, I believe that there is much, much more we can do immediately to ensure that it helps provide them with a better education. First, teachers can recommend educational programming, assign it as homework, talk about it the next day. In short, they can put a little pressure on children to choose educational programs over trivia more often at home.

Second, we can give our children more chances to see educational television outside of school. Today, many children do not go straight home, but spend their afternoons at after-school programs in community centers, churches, libraries, and day care centers. If we provided these settings with educational television programs, training materials, and VCRs, we could extend our children's school day — and during summers, their school year.

I am always puzzled and distressed when I hear about schools where teachers have refused to use any new technology, or where children are forbidden to watch television, in school or at home. There is certainly plenty of bad television, but sometimes I suspect we would rather reject altogether the most powerful medium we have, than figure out how to harness its potential on behalf of our children's education. If we hope to turn American schools and our children's future around in the next 10 years, as we must, we can't afford to dismiss television.

CLASS AND CASTE IN AMERICAN SCHOOLS

Joseph S. Murphy

Teachers, as citizens as well as professionals, have an obligation to tend to the preservation and extension of democratic institutions and processes perhaps to a greater degree than others. For those who teach in the public schools this commitment is sharper and more distinct. Public education is both the producer of democratic institutions and benefactor of their health and vitality. It has long been believed that in America to care about democracy means to care about public education.

The extension of the benefits of public education to *all* of our people has affected the social context in which education has been provided. First, efforts to achieve integration have resulted in white middle-class flight into private and parochial schools and the suburbs. Second, with the reduction of political support for decent schools in our largest urban areas, the quality of education for working-class people and minorities — those who remain in the city — is endangered. What is at stake is democracy itself.

This is so because freedom is allowable in our society and its unequal outcomes are tolerable if everyone has an equal chance. Important democratic principles are in jeopardy today. We no longer behave as though we believe that society has the obligation to try to provide the conditions under which equality of opportunity is possible and that whatever inequalities may emerge among us are due to differences in natural ability, talent and determination rather than birthright, privilege, inherited wealth or social status.

Equal opportunity is thus reflected in the degree to which a society supports education that is expansive and universal, allowing the individual to understand the context of his or her life within larger historical and social perspectives. The genuine critical capacities that a liberal education can develop in students carry political implications often overlooked in a society whose educational institutions are racially and economically stratified.

It is possible to allow large numbers of people to remain ignorant of the social conditions that influence their permanent status. The absence of a critical apparatus is itself an opportunity that welcomes certain kinds of explanations, principally those based on fate, accident, tricks of fortune, and — perhaps the most efficacious and persistent of all — divine will.

Other myths serve to enhance stability within a society by reinforcing the manner in which classes become stratified and work becomes organized and divided. Among these is the singularly most pervasive myth in American life — that if one works hard one can make it and that if one fails it is one's own fault. The fact the relationship between work, determination and tenacity on the one hand and wealth and success on the other cannot be demonstrated in any useful or consistent way does not dispel this myth.

Teachers must see themselves as involved in a greater social and political enterprise, one which goes beyond the dissemination of knowledge and culture and into the very heart of our national life and our future prospects as a civil society.

RETHINKING CHILDREN'S POLICY: IMPLICATIONS FOR EDUCATIONAL ADMINISTRATION

Michael W. Kirst and Milbrey McLaughlin

with the assistance of Diane Massell

Childhood in America is changing. Since 1969 an expanding cohort of children have come to experience poverty, a condition often associated with an increase in poor physical health, lower academic achievement and lower self-reports of happiness. Family structures have shifted and become more dynamic and work patterns of adult caregivers have altered. More children come from minority and limited-English-proficient backgrounds.

Stresses result from the disjuncture between the patterns of family life and a set of children's services, especially educational services, built on different models of family structure and functioning. The historic fragmentation of these services among an uncoordinated array of public and private agencies is not responsive to the complex and multiple needs of children today who need help. While becoming structurally outdated, the infrastructure of support for children and families has also been weakened by budgets strained to the limit by actual declines in allocations or by growing numbers of qualified recipients.

Only through the refashioning of children's services into a continuous and comprehensive system of care will the needs of the current generation be met. The school as a locus of service can provide the structural foundation for a new vision of children's policy, and by so doing become more effective at delivering educational services by raising their awareness and sensitivity to the broader experiences of children.

These transformations require that we begin with a simple, provocative question: what is it like to be a child who needs help?

The current policy approach operates top-down from the organizational perspectives of multiple service providers. In the following pages we sketch a statistical portrait of the changing conditions and needs of children based on information compiled by Policy Analysis for California Education (PACE) in its report. Next, we turn to an analysis of the structure of children's services, and suggest new directions by illustrating current efforts to overcome fragmentation. Finally, we point to the important role that the schools can play in developing a comprehensive system of care.

The Conditions of Children

Today nearly 20 percent of children in the nation live in poverty, up from 14 percent in 1969.¹ The median income of families in the bottom income quintile (20 percent) has eroded over time from \$9,796² in

1977 to \$8,919 in 1986, and the gap between the incomes of the poorest and wealthiest families has grown. The decline in real income to those in the lower quintile has been accompanied by gains for those in the top 40 percent of income. Race and ethnicity, gender, and family structure are strongly associated with the likelihood of poverty. In California, for example, 27 percent of Asian, 32 percent of black, and 34 percent of Hispanic children were poor in 1985-86, in contrast to 10 percent of all white children.³ In 1984 half of single women with children lived in poverty, compared to 11.4 percent of two-parent families.⁴

While many children fare well in households with low income, studies have shown that these children have a higher incidence of death in infancy and early childhood⁵, suffer serious illnesses⁶, become pregnant during teen years, drop out of school⁷, or are less likely to continue education beyond high school⁸. Despite statistical associations of these outcomes with poverty, the direction of causality is less clear.⁹ The life chances may be linked to the lack of access to adequate health care and nutrition, the often lower quality of schooling in poorer neighborhoods, the stress of poverty on family relationships, or other factors.

Most institutions that serve children and youth are organized on the assumption that children live with two biological parents, one working in the home and the other in the formal labor market. This type of family comprises only a small proportion of families today — less than a third. Forty-six percent of children live in homes where both or the only parent is working.¹⁰ Because of an increase in divorce and a rise in the number of births to single mothers¹¹, about one-half of all children and youth will live in a single-parent family for some period of their lives.¹² However, at any particular point in time 75 percent live in two-parent families, including stepparents¹³. Nationally, about one-tenth of families have a stepparent present. The proportions living in single-parent families vary substantially by race and ethnic group: in 1985 roughly 10 percent Asian, 12 percent of white children, 24 percent of Hispanic and 52 percent of black children lived in these family settings.¹⁴

Family structure is, as we have said, a good predictor of children's economic well-being, with single mothers disproportionately represented in poverty statistics. The hourly wages of single mothers are lower than those of other women (whose wages are generally more than one-third less than men), and although the majority of these women work, many depend on public assistance. Child support payments are notoriously meagre or nonexistent for most primary caregivers. In 1985 only one-half of all custodial mothers had court-ordered support decrees for financial assistance, and most received less than 50 percent of the payments stipulated. For mothers with income below the poverty level, the situation was worse. Only 40 percent obtained support decrees from the courts, and one-third of these actually received nothing.¹⁵

However, the conditions of poverty not surprisingly lead to disproportionate amounts of health problems. As mentioned, the morbidity rates of poor children are higher than the rest of the young population, and these children are more likely to suffer serious illness. A relative lack of prenatal care for women in poverty leads to low birthweight children, a condition which often predicts persistent health problems. In California, children in poverty in 1984-85 spent twice as many days in the hospital as other children. The two to one ratio also held true between minority and white children. In addition, blacks, Hispanics and other minorities are less likely to have health insurance than white non-Hispanics, especially in the "near poor" category where family incomes are too high to qualify for Medicaid but low enough to make private health insurance a serious financial burden.²¹

The major health problems for adolescents result from things they do to themselves or each other. They show a disturbing trend in deaths from suicide, murder and preventable accidents. In addition, 5 percent use illicit drugs, 20 percent smoke cigarettes, and 35 percent regularly use alcohol.²² Physicians estimate that about 10 to 15 percent of the children born in urban California public hospitals had drug or alcohol addicted mothers.

In sum, the overall condition of children as indicated by income, family structure and background, health, and other measures has changed considerably in the last few years. These changes compel policymakers and services providers to reassess the current system and consider anew the role of the school in children's lives.

Conditions of Children's Services

The condition of the services currently delivered to children and youth are plagued by two broad problems — underservice and service fragmentation — which amplify the issues and challenges confronting children outlined above.

Examples of underservice abound. At a time when families in poverty are on the increase, funding for supplemental income programs like Aid to Families with Dependent Children (AFDC) has been diminishing. AFDC has been reduced by \$7 billion since 1980, and in 1985-86 the parent(s) of less than *half* of all poor children nationwide received income from AFDC. Furthermore, the supplemental income that AFDC does provide often falls short of families' minimal needs.

A decaying infrastructure of support for children from poor families is also evident from the facts that 39 percent of eligible children do not receive free or reduced price lunches, one-fourth are not covered by health insurance, 38 percent do not receive food stamps, and only 21 percent of all families in poverty have been accommodated in public housing.²³

Other segments of support for families are overburdened as well. Although California far exceeds most states in providing funding for

The way family structures develop has consequences for children. When single-parent families occur as a result of divorce, the consequences, at least in the short term, may be negative for children's emotional well-being. A study of 7- to 11-year-olds found children of divorce twice as likely to use mental health services as other children the same age. Children of divorce are more likely to become substance abusers, marry as teenagers, become sexually active at an earlier age and become pregnant more often. Single parenthood, whether as a result of divorce or otherwise, is often a stressful situation for the parent, and one that may have consequences for the child-parent relationship. In addition, children of single mothers who have never been married tend to be even poorer, more dependent on welfare and living in poor housing.¹⁶

In recent decades both female and teenage work behavior has changed dramatically. While working mothers from poor families were not uncommon in the past, women from middle and upper income families have come to join them. Economic pressures have made the option of becoming a full-time homemaker almost obsolete for the majority of women and men.

As of 1987, over one-half of all mothers with children under 6 and nearly 70 percent of mothers with children aged 6 to 17 were seeking employment or worked in the formal labor market outside the home.¹⁷ As with other indicators reported here, this varies by race and ethnic origin. Forty-two percent of white and 51.4 percent of black mothers of children under 6 worked.¹⁸ The consequence of changing work patterns is a high (and unmet) demand for affordable quality child care and after-school care.

Teenagers, too, are working in the formal labor market in large numbers. In 1985, almost 62 percent of all 16- to 19-year-olds worked during some part of the year. At least one-third of all high school students hold part-time jobs in any given week, with 75 percent of seniors working an average 16 to 20 hours weekly.¹⁹ The majority of this income is used to buy clothes, food, and personal items. The evidence on the effect of work on teenagers is not definitive. Some studies have found that working detracts from schoolwork and was associated with dropping out. But other research and program evaluations suggest that work can provide positive models and can lead to improved academic performance.²⁰

In general terms, progress has been made on a number of fronts concerning children's health. In California, for example, 97 percent of kindergartners have received adequate immunization for measles, rubella, and mumps. Death rates from communicable diseases such as tuberculosis and pneumonia have fallen by a hundredfold in the past 50 years as a result of antibiotics, sanitation, and other advances. Fewer than 10 percent of California's children are considered to have serious health problems and/or chronic disabilities that limit their activities.

child care, public programs met only 2.2 percent of the child care needs of children up to 2 years old from families eligible for subsidy. For children aged 3 to 5, public programs served only 17.9 percent of the eligible population, and 7 percent for children 6 to 10 years old.²⁴ And the cost of care exceeds most families' ability to pay. Again using California as an example, the average costs of preschool care for one child in 1986 consumed about 11 percent of the income of a family earning at the median level, and 27 percent of the income of a family of four at the federal poverty level.²⁵ Also overburdened are child abuse delivery systems; in California, for example, one-fifth of the emergency response calls for child abuse went unanswered for a week or more.

Single-issue policies and single-issue solutions dominate social policy in America. Historically, they have arisen *ad hoc* as problems were "discovered," problems which largely were framed by the political environment rather than a bottom-up and comprehensive picture of children's needs. The result was a patchwork of services, a fragmentation that weakens a system laboring under resource constraints and growing needs. In California over 160 programs residing in 35 agencies and seven departments exist to serve children and youth, an array that certainly is not unique to this state. The tally does not include the many private organizations that also provide important assistance.

Lost in this fragmented intervention is an opportunity for professionals providing children's services to observe or acknowledge the cumulative impact of their activities on the lives of children and their families. With compartmentalization children and families continue to fall between the cracks of different administrative definitions of the problem. Individual agencies typically focus on discrete pathologies and apply a programmatic label that misrepresents or oversimplifies the nature of the problem, and obstructs comprehensive assessment or response. In all sectors, there is a crucial imbalance favoring acute care over preventative or developmental services. Conflicting concepts of purpose or treatment philosophies among the various agencies create additional dissonance in the lives of troubled children.

These aspects of the "system" of services cost the children involved dearly. Children and youth are shuffled, often unsuccessfully, from one level of care to another (e.g., from inpatient psychiatric hospitalization to residential treatment) or from one service provider to the next (e.g., the child who has drug abuse problems, an abusive parent, is failing school, and has been arrested will move in between various clinics, schools and the juvenile justice system). To expect one child or family to negotiate the multiple interactions with all these different organizations, and to seek out help from these various providers, is unrealistic. But no existing mechanisms trigger comprehensive planning or integrated case management that is critical for children with multiple needs.

The isolation of services has particular consequences for schools, the institution that has the most sustained contact with children and their families and where the problems of children's lives often become most manifest. Most schools lack information about or systematic contact with other agencies that could address physical and mental health problems, drug abuse, and other problems. Broad networks for sharing information do not exist at the base of children's services because few efforts have been undertaken to collect information on the scope of available care.

Towards a System of Children's Services

As we have seen, the consequences of a system of children's services that are defined by administrative boundaries and conceptions of "turf" are more than simply exasperating or inefficient. The system, many professionals and analysts agree, is beyond fixing with a bit of this improvement and some of that innovation. It is in need of fundamental rethinking. This is not a new conclusion. Neither is the prescription of "more integration," "more coordination" and "more collaboration."²⁶

Yet most analyses stop with this plea. The problems of doing other than continuing current arrangements are admittedly formidable. An institutional structure of children's services that is built upon political compromise, time-honored professional terrain, and existing administrative arrangements intimidates efforts at reform. Financial resources encouraging agencies to coordinate are nonexistent to negative. The socialization and training of professionals in the university reinforces isolation of sectors. Traditional departmental structures and separate schools of education, social work, public health and public administration stymie interprofessional understanding. Nor does intellectual integration occur once the professionals move into the work force. Organizationally, public elementary and secondary schools encourage fragmentation, since they are independent from the governing authority of county, city and other children's agencies, and have their own taxation.

However, even in the face of such imposing difficulties, a number of promising responses to the problems inherent in present arrangements are appearing in California and other communities around the country. While they fall short of addressing dysfunctions in the system and attempt more modest goals, they can provide valuable and real-life lessons about the problems and the potential benefit of cooperation and coordination.

One example of dealing with the discontinuities in services occurred in Ventura County in California. Ventura established an inter-agency network among Mental Health, Social Services, Corrections and Special Education agency directors, who formally consented to share responsibility for a system to integrate services to clients. Written interagency agreements identify the range of problems that place a child at-risk and the treatments the agencies will implement. With a specific focus on high-risk children who are either potentially or actually living out of their natural

homes, the Ventura program reportedly has been successful in blending services and personnel into a comprehensive and continuing treatment plan for troubled youth. Services follow the child, thereby establishing new links with private sector providers.

In San Bernardino County, also in California, all major youth-serving agencies — juvenile justice, the schools, public health, community services, the district attorney, the sheriff, libraries, Head Start, probation and others — participate in a Children's Policy Council. Another council with broad membership from local organizations provides advice and "grassroots" awareness of problems and community-based children's issues to the policy council. It has organized a team to provide on-going monitoring and evaluation of program services, as well as a body charged with developing a partnership between the public, private-for-profit, and nonprofit sectors to provide monetary and in-kind contributions, goods and services.

In both counties, planning for an integrated service model was facilitated by special funding from state sources, and influential members of the community — a juvenile court judge in both cases — pushed for change. Both efforts had high-level support from key agencies from the beginning, as well as a strong commitment of middle-level professional staff.

Another service coordination effort has been attempted in Minneapolis. Unlike the Ventura and San Bernardino examples, which were begun and are sustained by youth service professionals, the Minneapolis Youth Coordinating Board (MYCB) is a product of municipal government and the mayor.

Created through a joint powers agreement between the city, the school district, the county, the library board and the parks and recreation board, the 11-member MYCB seeks to integrate services for all the community's young people, not just children with special needs. Plans began with a well-regarded early childhood family education program that served all children from ages 0 to 5 with home visits, child advocates and other services. Each of the five sponsoring governmental bodies contractually agreed to provide at least \$100,000 each year for five years to support basic staffing and operating costs, and MYCB has created a local property tax base to provide additional support.

The MYCB has been propelled by the vigorous commitment of the mayor, who has made its development a top municipal priority. Further, the use of the early childhood family education program mobilized broad community support for the effort and was important to the MYCB's present level of operation.

Another alternative strategy for securing better integration is illustrated by the Ounce of Prevention Fund (OPF) in Illinois. Created in 1982 as a partnership between the state child welfare agency and a private, philanthropic institution, the OPF serves as a broker and coordinator of services in a number of communities throughout the state and

supports a statewide system of service, research, training and technical assistance. It focuses on community-based programs for pre-teens, teen parents, and their families. The Fund appears to be an effective response to the regulatory tangles that impede interagency coordination because, as a third party organization, it has more flexibility to blend services and activities, and is free of the suspicion of narrow self-interest and can distance itself from problem definitions rooted in professionally prescribed domains. As a leverager of community-based support from an array of sources, it is able to enhance the resources available to the youth it serves.

While each of these efforts has pursued substantively different programmatic strategies, each also has self-consciously *reconceptualized* the purpose of children's services, moving from the traditional clinical and constricted notions that dominate most practices to a developmentally-based view that sees the needs of youth as evolutionary and continuing. These approaches place youth services in the broader context in which children live — family, school, neighborhood.

For example, the OPF seeks explicitly to shift services from traditional perspectives based on a model of individual pathology to services that are built on models of individual development. The MYCB also features developmental language.

Of course, only systematic evaluations over several years could tell us whether these approaches have been successful in meeting their objectives. But merely locating many children's services in one place helps clients to use the system more easily.

Schooling as a Locus of Integration

Another strategy for integrating children's services would be to locate them in one service setting. Schools are one logical choice, since they provide an organizational context where sustained, ongoing contact with children occurs. The continuity of contact facilitates a relatively long-term view of the needs and concerns of children, and is accompanied by a developmental approach that could enhance responses by other agencies that have tended to react to problems only when they become acute. The school provides a setting where new needs can be identified quickly and where continuing dialogues can be established with children to better include them in the processes of identifying problems and possible solutions.

Under a new vision the school could become the site or broker of numerous services, such as health clinics, after-school child care, alcohol and drug abuse programs and organized recreation programs, although they need not be the only location of interagency collaboration. More child care and preschool programs could be located on or near school grounds to provide a better transition with the regular school program. While the schools could not financially underwrite these services, they could provide the facilities and welcome city, county, and private agencies to school

grounds. They would need additional funds to help provide integrated case management of the student with multiple problems.

The familiarity of a case manager with all matters of consequence affecting the family would improve assistance to parents and youth, and help to prevent problems before they emerge or become severe. The effective case manager has knowledge of, and attempts to, orchestrate the various public or private agencies that can help. The effective manager also encourages the individual to identify his or her own problems and an appropriate course of action. Teachers and administrators can become more active participants in preventive efforts, and schools could provide incentives for them to engage in collaboration with other agencies.

The school as the site of numerous children's services will require a rethinking of the role of the principal. The principal could be designated chief administrator of the broader array of services. This kind of change would require alterations in the current scope of principal preparation and staff development programs, and would impinge on time otherwise devoted to instructional or school administration tasks. Another strategy would be to locate a children's services coordinator at the school who would be employed by county or city government and report to an interagency council of local children's services.

Obstacles to making the school the center of a coordinating system are present, however. In the early part of this century schools developed a governing board and tax base separate from other units of local government. The result has been infrequent and often adversarial relationships with town/municipal governments.²⁷ As detailed in a national study of school boards:

Local boards and their members have only sporadic interaction with general government and tend to be isolated from mainstream community political structures.

There is very little systematic communication between school system governance and general government, despite the fact that increasing numbers of students have learning problems associated with non-school factors. These include poor housing, lack of family support and resources, and limited employment opportunities. In addition, when interaction between the school system and general government does exist, it often is only through the superintendent. Fiscally dependent boards which must interact with town/municipal government bodies frequently are mired in adversarial relationships.²⁸

A more comprehensive approach towards children's policy with the school as a major player has unusual potential now, in part because of overlapping intergenerational interests. People are more acutely aware that Social Security in their older ages rests to some degree on the productive capacity of the young, and contrary to expected many communities are finding

their citizens supportive of school funding than their age or lack of school-aged children would have predicted. Simply in terms of academic success, the bottom third of the achievement band and students who are failing from numerous interrelated problems are not likely to be helped much by a strategy that focuses *solely* on raising academic standards or providing more teacher decision making. The notion that learning and other aspects of children's experience are interrelated could create the political momentum for efforts that seek to locate integrated services at the school site.

Given the rapidly changing nature of school populations and the persistence of poverty, health and other problems, policymakers and school practitioners must bridge the connection between the conditions of education and the total conditions of children. Promising responses can be crafted by moving from a focus on component aspects of the problem — teachers, texts, families — to a focus on the functional requirements of a healthy, curious, productive, motivated child.

This changed perspective draws attention to the child as an actor in a larger social system and to the institutional networks and resources present in that environment. It requires looking beyond family to the primary networks that make up a child's world, and thinking of the school in a new way. Taking this view, the school moves from the role of "deliverer" of educational services to the role of broker of the multiple resources that can be applied to achieve successful, productive and happy lives for children.²⁹

Conclusion

Our understanding of the ingredients to successfully initiate local service integration suggests that flexible initiative money through foundations has been crucial in generating effective local child resource policies. Other key characteristics are cooperation among mid-level bureaucrats, commitment from top executives, and adaptation to particular local contexts. The enlistment of education, health, protective services and other sectors' professionals and leaders, as well as among those across the public and the private sectors, is critical to effective integration. Their support is needed not only to give a momentum to changes that would organizationally bridge the various services, but to give them a chance for success in the processes of practice.

Consequently, we believe that federal and state government should provide seed money and prescribe a local process for the reconceptualization and planning of an integrated children's services. We are more skeptical of top-level reorganization like state departments of children's services or a state children's code of law, since these end up being largely symbolic and ineffective means of integrating practice. The latter will require linkages among local level participants.

The longer range perspective requires support from research and evaluation that presently is missing. One of the chronic problems

in attempts to develop complex understandings of the conditions of children's lives is the lack of adequate information about the aggregate effects of the national, state and local services on individuals, and groups.

It will also require that the high boundaries between professions be lowered, beginning with university training and extending through professional practice. Programs to prepare educational administrators should provide more interprofessional experiences and curriculum. Ohio State University has designed such programs that help bring together nurses, doctors, lawyers, social workers, educators, and others. This early orientation to interprofessional preparation can help break down the barriers that are built into the delivery system and create integrated professional networks.

But most importantly, coordination of youth services must find an organizational and structural center. We suggest that the school would be one of the most logical and effective hubs of integration.

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CHANGING THE SYSTEM OF SCHOOLING SO THAT THE SCHOOL OF THE FUTURE HAS A CHANCE

Frank Newman

As the United States looks ahead to the schools of the future, we will need to come to grips with an important issue. We must change the system of schooling so that the school of the future has a chance. We are headed into a major period of school reform quite different from the one we have just been through. In this new period, the focus will be on the restructuring or redesign of schools, the changing of schools so that they become effective, exciting centers of learning, turning out a far better educated graduate capable of participating in a far more complex world. As this new trend has emerged, almost all of the attention, so far, has been focused on changing the climate of learning within the school itself. This is important, the essential starting point, but changing the school alone will not do the task.

As the school reform process has proceeded during the 1980s, it has become more and more evident that schools are too bureaucratic, too much like a factory. Too often, they fail to encourage students in the art of learning, and fail to give them the sense of the joy that comes from active participation in the learning process. Why is this the case? In part it is because it is easier to stand in front of a group of students and lecture at them rather than to engage them in a well constructed give-and-take. For one thing, lecturing is far less threatening to the teacher.

Similarly, for the principal, it is easier to manage a school than to lead it, easier for the principal to tell the teachers what to do, to insist on following the rules and the lesson plans. It is far more threatening to engage the teachers in a serious discussion about how to apply the latest research and new experimental ideas that are being developed around the country. So that perspective is transferred on to the district level and to the state, where it becomes easier to mandate than to create new policies that effectively empower schools and principals to encourage more effective and active learning.

Every day this results in a growing mismatch between the schools and society. It is not that schools have failed in the United States, it is that circumstances have changed. First of all, the definition of what it means to be an educated person is becoming much more complex. In part this is because we now need every American citizen to have a much deeper knowledge base. As the National Assessment for Education Progress shows, this is particularly so in the fields of science and math, though significantly so in other fields. But the demand is for much more than an increased knowledge base — we need students who become citizens with the capacity to think creatively, who understand the international nature of the world, and who are prepared to contribute to its progress.

The second part of the mismatch is that a growing number of students come to school without the family and community support that is so essential to self-confidence and to the belief in one's own future that is the bedrock upon which effective learning takes place. School cannot and should not replace the family in such circumstances. It can, however, as plenty of evidence shows, have a powerful impact by supplementing the family and helping students gain these capacities.

And, finally, there is a shift, which is affecting the entire world, from an emphasis on control to empowerment. In the United States we saw it first within industry. When industry itself began to restructure, what it meant by the term was the empowerment of the individual. Of course, American industry is not alone in this. Whole countries such as China, Russia, Poland and Hungary are moving from an emphasis on hierarchy and control to an emphasis on empowerment and contribution. We now know that the complexities of the world within which we are already living, let alone the world as it will be in 10 or 50 years, plus the intensity of the international competition we face, require of us more than just a hierarchical approach. We must prepare our graduates for this world of empowerment, participation, and involvement.

The tendency when we discuss these changes is to focus on changing the operating mode of the school. In itself this is a difficult task. What has been proven is that with enough energy and leadership a school can be turned around and transformed. There are examples, literally hundreds of them, of such schools around the country, usually brought to a new and more effective status by an imaginative and courageous principal. There are also many more organized attempts, particularly the Coalition of Essential Schools, and now increasingly in efforts by states such as the Re:Learning Project of the Education Commission of the States, and in cities such as Miami, Pittsburgh, Rochester and San Diego.

The problem, as these cases often demonstrate, is that over time these enormously beneficial changes within the school tend to erode under the pressure of an unchanged school system. The principal and the teachers in the innovative schools are often seen as mavericks. Regulations impede their ability to try new approaches. The bureaucracy gradually overwhelms their capacity to innovate. Sometimes it is something as simple as a thoughtless transfer of a principal and the bringing in of a new principal without any commitment to hard won gains. In other cases it is actual overt hostility on the part of the bureaucracy.

There is a second condition that requires a system that creates a climate of incentive for change. We need not one round of change but endless rounds of changes. If we could restructure every school in the United States today, in 10 years these changes would be inadequate because of continuing change in the world. Society within the United States becomes ever more complex. Other countries with whom we compete are

struggling to improve their schools as well. What we need, therefore, is a system that is dynamic, and that encourages and rewards continual and self-renewing change.

How can we bring about such a system? First, it is important that we always begin by focusing on the question of student learning. We need to create a climate within the schools, and then within the school system, that encourages students — all students — to use their minds continuously. Students must be challenged to learn not only what the answer is, but what is the nature of the problem. They must learn how to construct the knowledge they need from an increasing array of resources, not just memorize a textbook. In Ted Sizer's words, "The student must become the worker; the teacher must become the coach." Students must learn how to work together, for the world which they will enter upon graduation is made up of people working together. This means an open and honest give-and-take with each other and with the teacher.

For this to occur, the system must adopt a series of basic premises. Here are a few:

- The focus must always be on student learning. Every issue and every policy must be examined to see that it contributes to student learning.

- Involvement of people at every level must be encouraged. School and district leaders must be involved in state policy making, principals must be encouraged to become involved in district policy, teachers must be encouraged to be actively involved in school policy, students must be encouraged to be involved in the classroom.

- There must be a shared vision — A clearly understood set of goals must be created with the involvement of as many people as possible, including parents and community leaders.

- There must be high expectations. A large and growing body of evidence supports the concept that students will largely achieve as much as we expect of them.

- There must be support of risk-taking. If attempts to create new ideas and creative approaches are met with hostility, or if every attempt at innovation that does not turn out perfectly is met with a rebuke, who will attempt to be creative?

- There must be recognition of the fact that no two schools will be alike, no two teachers will teach the same way, but that basic principles do apply.

In addition to adopting such basic attitudes, school systems need to reconsider what kinds of policies will help encourage change and keep successful innovations in place. Policy can do much to stifle creativity and excellence, or it can do much to encourage it. Here are a few of the policies that have been suggested so far:

- There should be access to information of all kinds, how

well students in each school are doing, how well the school district is doing.

- Modes of testing and assessment need to be reviewed. Over time students learn what the tests ask. If tests trivialize student learning, over time one will get limited modes of rote learning as a result.

- Rules and regulations that interfere with, rather than aid, responsibility at the school level need to be reduced.

- De-layering — the reduction of the layers of bureaucracy in the total school system — needs to be accomplished just as much in the schools as it has been in business and industry.

- Schools are far more effective as learning centers when they are smaller in size. There is considerable debate about what is the right size. Schools must be smaller for at-risk students, who need much more personal attention, than for students who are more self-confident. But an upper limit of 500 has proven to be effective in many settings.

- Parental choice of schools, used properly, can encourage creativity on the part of school leadership as well as parental involvement that translates into greater learning.

- Alternative forms of certification can provide new pathways for effective people to enter the teaching force.

- Incentive funds in small amounts can be given by a state or a school district to encourage innovation. Several states have created programs of competitive grants that encourage school districts or schools within districts to develop new approaches to learning.

- Retraining of teachers and principals is essential.

- Teacher education must be changed. Traditionally, college graduates have performed in the role of change agents, bringing to industry or to government new ideas and new willingness to employ such ideas. But the schools of education are far behind the schools at the moment, particularly as these new ideas are beginning to take shape. The pressure on higher education must continue to build until sooner or later teacher education moves into new modes more suitable for the current times, and universities become linked in effective collaboration with schools.

No one of these policies alone will turn around any school district. But these and others, taken together, can make a major change. It is inevitable that other things will be added to the list as reform proceeds.

The school reform process in the United States is a heartening one, but it is entering a new and more complex phase. States and the private sector, both sensing the urgency of better schooling, want to help. But to capitalize on this golden opportunity, schools and school systems must open themselves to new ideas and new influences. To reform a school district or state schooling system is much more difficult than to reform a school. But if the school of the future is going to produce an effective citizen for the next century, then the school system of the future will have to become a different animal than it is today.

INCENTIVES FOR REFORM

Albert Shanker

Where will American public education be in the 1990s? I'd like to be able to predict schools where the dropout rate has fallen into the single digits and every student is successful. But some days I wonder if our schools will survive the coming decade. The school reform movement has not succeeded in making the basic changes the schools need. And the projected shortage of teachers that will overtake us a few years into the 90s is likely to make change even more difficult. In the meantime, some critics are calling for measures that could bring public education to an end.

Americans have had plenty of indications that their education system is in trouble. From "A Nation At Risk" and the National Assessment of Educational Progress (NAEP) to the tests showing how badly most of our students compare with students from other countries, we've heard all about the deficiencies in our schools, our teachers and our students. And we've seen many changes in response to these criticisms during the past six years — most of them the result of sweeping mandates from governors' offices, state legislatures or state education commissioners. Teacher merit-pay and career-ladder plans have come and, in some cases, gone. Entry-level teacher testing is now the norm. High-school graduation requirements are generally stiffer than they were in prereform days, and many jurisdictions require competency tests for promotion and graduation. In some places, even athletes and cheerleaders have been benched for low grades. But if you look at the way students and teachers spend their days, it's clear that these reforms haven't changed the fundamental assumptions or structure of our schools. They haven't fixed the problem.

American automobile companies have found themselves in trouble, too. Their response has been to look at their methods of production and try to change them. They've looked at the way cars are produced in other countries, especially Japan. They are experimenting with production teams, and asking workers what they think would improve the process. But schools still run like assembly-line factories.

Every child in a given community still starts school by virtue of having passed a certain birthday. Children arrive together on the same day at the beginning of school and leave on the same day at the end. They still are organized into large classes where, at the elementary level, they spend most of the day listening to a teacher who must push or pull them through the various lessons so they can all get more or less to the same point at the end of the year. At the secondary level, students still are passed as a group from classroom to classroom, teacher to teacher and subject to subject about every 40 to 50 minutes. Instruction still is organized by curriculum, and curriculum is organized into units to be "covered" and tested

by a certain time. We live in a technologically sophisticated society, but "chalk and talk" still is the main technology of schooling from K through 12. We give lip service to the idea that individuals learn in different ways and at different rates, but, in fact, everyone still is expected to learn in the same way — by listening to the teacher talk, by reading books and by reciting and answering questions — and learn at the same rate in order to be considered "normal."

In other words, most schools still act as though education is something done to a child — poured in or glued on — rather than something the child, with the help of the school, makes happen.

Of course there are exceptional schools and school districts, places where teachers and administrators are trying to make basic changes in the way they educate kids, but they are only a handful. Most schools in the 16,000 school districts in the United States are remarkably similar — and unchanged from what they were 50 or 75 years ago, when the grandparents and great-grandparents of our current first graders might have been in first grade. While waving the banner of reform, reformers have just tinkered with the existing system; they have fine-tuned it, but its structure is unchanged.

What's the problem? There's no end of talk about the economic costs of poorly educated workers and the social costs of an underclass of high school dropouts. And no end of talk about restructuring our schools. I've contributed to it myself. Sometimes I feel a little bit like the preacher who goes around telling everyone to stop sinning. During the talk, if it's a good one, people are inspired — they're ready to change — but when the preacher returns next week, they're already back to their old habits.

There are many reasons for resisting the kind of change real school reform would involve. In fact, there are more reasons for not changing than for going ahead and doing it. And everybody involved with the public schools — and that means nearly everybody in our society — is part of the resistance: the public, parents, school board members, administrators, teachers. (The kids might resist, too, if anybody asked them.)

It's hard for some people to get far enough away from an institution like the public schools even to see the need for basic change. The schools — run as they are now — have been part of most people's lives since they were in kindergarten or the first grade. The way they run seems as obvious as the sun, moon and weather, and that makes thinking about change a big order. Some people are complacent — it's the other school districts that are in trouble; the problem is over there. Some people — people in poor areas — can't think about change because what they are thinking about is just surviving. Some people are afraid that change will hurt them — they could lose their job titles or their jobs. Some are just afraid.

But despite the general resistance to change, there are people who have begun to alter radically the way they run their schools.

There are good ideas out there and places where people are trying to make them work — but only a handful. No wonder; good ideas aren't enough to make a difference. You have to be a hero to work for change when few people will support your efforts and many will actively resist them. And most people are not heroes. Most people look at all the work that goes into restructuring a school and say, "That's not for me — it's too hard." Yet if we don't get everyone to participate, we'll remain stuck. The good ideas will disappear as the heroes burn out.

The answer? I think we can motivate all the people in our schools to rethink and redesign how we educate kids if we offer the right kinds of incentives. Incentives fuel our economy, and as businesses understand very well, they can move large and disparate groups of people to work for a common goal. Incentives can create a critical mass, and that's exactly what we need to reform the public schools.

Before we start on this project, though, we need to recognize that our schools currently operate like command economies. The incentives, where they exist at all, are lined up the wrong way. A school doesn't get fewer resources because it's doing a bad job or more because it's doing a good one. If a school has many unsuccessful students, it might even get additional money for more of the same kinds of programs and more people to administer them. In other words, we might actually encourage teachers and administrators to go on doing things in ways that don't work. For students the problem is a little different — instead of incentives leading in wrong directions, we offer students virtually no incentives to succeed in school. So how can we apply the principle of bringing about change through incentives to schools?

We can begin by restoring incentives for students. We all tell students to work hard and get good grades because that will be important when they get out of school. But, except for kids who are applying to highly selective colleges, success in high school doesn't make much difference. Any high school graduate will be able to find a college willing to admit him; if he knows how to look, he'll probably find several. Money, not achievement, is the only barrier.

Success in high school is even less important for students going right into the work force. Few employers ask what courses students have taken or what grades they've gotten. And they don't ask teachers for references, either. There is no connection between working hard or doing well and getting a better job or a better salary. So why should students listen to parents and teachers who urge them to exert themselves? Why should they do more than put in time?

Businesses that understand the value of incentives when it comes to their employees, and they need to put this understanding to work when they hire new graduates. The Japanese could help us here; they have a system linking high schools and companies that regularly employ

new graduates. This system helped them pull their schools out of a mess comparable to the one we're in. We should redesign it to suit our needs and try it.

And what about encouraging school restructuring by setting up competition among schools? I'm not talking about the kind of competition where winners get framed certificates and copies of news releases to send to local newspapers. Nothing wrong with that, though I don't see it as an instrument of change. But competition can encourage people to undertake real reform by lining up incentives in the right way and rewarding people — teachers and administrators — who succeed.

Many companies offer cash awards to employees or groups of employees who meet specified challenges or goals. They say this does great things for production and consider it money well spent. And modern companies often make the competitions team efforts because they realize they get better results by encouraging people to cooperate than by pitting people against each other.

What if the government offered cash awards to schools or school districts that reformed themselves and gave proof of progress and change over a given period of time — say, five years? The sum of money is important; it will have to be large enough to be worth working for — perhaps \$15,000 for every staff member in a school or school district.

For this scheme to work, participating schools must be free to try new things. This means school districts and unions will have to waive various rules and constraints that might keep them from considering any and all promising possibilities for change — except of course for rules dealing with health, safety and civil rights. And it means that school boards will have to give each participating school control over its budget.

The five-year time period is important, too. A year or two wouldn't give people enough time to experiment with new ways of reaching the agreed-on goal. If you take a wrong turn during the first year of a two-year project, that's it — you're not going to recover. So most people would just play it safe and do some simple thing. And we know from experience that adjusting or fine-tuning the system we have won't do the job. Give people a little more time and you have a chance of their coming up with something new and refining it so it works.

The terms of the competition and the methods of assessing the competitors would be the hardest of all. Some people I've mentioned this idea to have said, "That's a great way of rewarding schools that are already on top." But of course there would be no point to setting up this kind of competition unless we could figure out some way to create a level playing field so an inner city school where people aren't used to success can have as good a chance of winning as a school whose students usually come out on top.

The assessments would have to be something much better than the current crop of standardized tests. It's important to assess student success in a variety of ways, so we'd want to consider some of the promising new developments in assessment — student portfolios, for example. In the short run, we might look at NAEP to see if it could be adapted to this purpose. People are doing some interesting things in assessment, and this would give us the opportunity — the incentive, I should say — to examine them.

As for the money to carry out this project, President Bush has already proposed merit schools legislation that would allocate \$500 million a year for awards to outstanding schools. Say that money was invested every year for five years — the term of the competition I'm proposing — and say every school district in the country entered the competition. At the end of five years, we'd have enough money to make a substantial award to 10 percent of the competing schools — the \$15,000 per staff member I mentioned earlier. And if only half the schools in the country entered the competition, we'd have twice as much.

Would this work? I don't know, but we see the power of competition all the time — and not just in the business world. Schools with team sports and academic and artistic competitions of various kinds have plenty of experience with how competition encourages everybody's best efforts. And it strikes me as a good way to overcome the built-in resistance to change in our schools. Now, even if the school board and the superintendent and the principal and 75 percent of the teachers in a school favor change — and those are very favorable circumstances — we still have 25 percent who don't go for it. And the majority will probably be hesitant about pushing something on them they don't want. But give all these people with their divergent points of view common cause, something concrete to work toward, and you might see them pulling together. That's the story of competitive sports — and war efforts — and I don't see why, with imagination and care, we can't frame a plan that would give our schools real incentives to reform themselves, to bring about the changes that seem so far to elude us.

If it doesn't work, some schools would carry on with the restructuring they are doing now. The successful ones might shed enough light to encourage other efforts. Public school choice might make changes in the landscape — some for the better, some for the worse. But I don't see a force or an idea that will unite 16,000 school districts to make the effort that's essential.

We've been running our schools as command economies for so long that the notion of using incentives to drive schools to change and students to achieve may strike some people as too radical — even though that's the way we do it in every other sector of our society. But things are rad-

ically wrong with the current system, and the choice is clear: We can continue with a proven method of failure — schools as command economies — or we can try a system of incentives that is new to education but has been successful everywhere else in our society.

Fear certainly hasn't accomplished anything. The news couldn't be worse. We are getting closer and closer to vouchers. Closer to schools run from state departments of education. Closer to businesses coming up with our answers for us. Yet people continue to act as if the public education system, run as we run it now, will go on forever. With the results we're getting now, I wouldn't count on that.

A FEDERAL EDUCATION AGENDA FOR THE '90s

P. Michael Timpone

Education will be a national issue of the first magnitude from now on. President Bush has made it clear that he intends to lead in this area. The governors and the states have been the source of new resources and accomplishments in the 1980s; their commitment will persist, if only because the economic development themes that have engaged them will also persist. Similarly, the business community is discovering its permanent and growing need for more effective schools. The public continues to place education at the top of its priorities for progress. Most parents and students retain an abiding faith in education as the surest path to personal advancement. The problems of poverty and of multiethnic and multiracial diversity, which education must help our society surmount, will persist. A growing number of school leaders and teachers seem ready to adopt fairly radical measures to improve the schools.

The federal government has played, and must continue to play, a crucial, if limited role in the resolution of the nation's educational problems. That role cannot be defined solely by the major programs developed during the 1960s and '70s, or by the rhetorical trench warfare that has characterized most of the 1980s, or by the specter of budget and trade deficits exhausting the fisc in the immediate future.

It must be defined by the issues of the '90s: the growing curse of defeat, discrimination and despair among the chronically poor segments of our population; the broad concerns about employability, productivity and competitiveness that animate political and business leaders, and the necessary rebuilding and reform of education professions and systems.

Operating on a policy base established in the 1960s, the federal government's posture in recent years has become steadily less activist. Since the expansions of student aid and special education, there has been little program development in the past decade. The creation of the Department of Education provided a bully pulpit instead of new federal programs.

The Reagan Administration failed in its avowed intention to dismantle the Department of Education. Budget rollbacks of the early 1980s produced short-term declines in the real levels of federal education expenditure, as well as the elimination (or consolidation) of several small and weak programs, but by 1988 spending had bounced back in real terms to the levels reached in 1980.

Over the past 10 to 15 years, the states, confronted by the stalemate in federal policy arenas, have taken over much of the development of national education policy, and have gradually been exercising more and more leadership in the field. In this process, traditional distinctions between liberal and conservative policies and policymakers have almost disappeared:

the educational agenda of Republican and Democrat, North and South, East and West, are indistinguishable one from the other.

As we approach the 1990s, a convergence of views may be emerging out of the arguments of the 1980s which will undergird new directions in federal educational policy. The similarity of the perspectives of the two presidential candidates last year, and of the governors of the several regions and both parties, suggests this. Strongly expressed concerns about the economy do not appear aimed at distorting or limiting academic expectations, but rather at reinforcing them. The push for excellence does not seem to be occurring at the cost of equity, but appears, ironically, to be concentrating much of its attention precisely on those students in schools who are performing least well; the cry for "excellence for all" is far more than a political bromide. The debates over the place of values and ethics in the public schools have not ended all differences of opinion, but have begun to identify a common ground, be it "civic virtue" or another term, for imparting strong and pervasive values in our schools. The provision of choice in the public schools has become an accepted attribute of many programs. The notion that the educational system — at every level — must be accountable in some sense to the public for its outcomes (and not simply for the intensity of its efforts) seems to be ever more widely held. The appropriateness of the main directions of current education reforms — toward more professional stature and performance in teaching and dramatic restructuring of the schools — enjoys broad consensus among educators and policymakers. In short, we may be at the end of an extended ideological skirmish and at the beginning of a shared understanding of the necessary components of education progress in the nation.

The Federal Role

What, then, should characterize the role of the federal government in education as we approach the 1990s? The role should be traditional in terms of our federal and educational history, but vigorously reshaped to the times.

- Equal educational opportunity should remain the major preoccupation of the federal government — reshaping and rebuilding major programs assisting poor, minority and disabled students at every level of education and massing educational, health and social services for the children of chronic and persistent poverty.
- The provision of information and limited, concentrated resources for the reform and improvement of schools should be substantially expanded through research, gathering of statistics and development and demonstration programs. The absence of adequate, timely and reliable information and encouragement has been a hindrance to state and local reform efforts so far, one that should be swiftly removed by federal initiative.
- Federal education programs should support related national objectives, including economic growth and productivity and scientific

advancement through research and training.

To these longstanding emphases of federal education policy, we must add one of more contemporary origin: the development of national leadership in partnership with the states. The new national leadership role has been emerging rapidly since the creation of the Department and Secretary of Education. The actions of Terrel Bell and William Bennett, different though they were, prove the point. Their accomplishments in stimulating and shaping the policy agenda in the 1980's not with dollars or programs but with reports and pronouncements, reflect a growing need for national (not federal) action to identify educational problems which are truly national in nature, even though their solutions may lie in the actions of all levels in the federal system. (And Secretaries Bell and Bennett did what they did without much Presidential support. Imagine what might be possible for Secretary Cavazos with the consistent support and participation of President Bush.)

Such a federal role, while it should be no substitute for adequate levels of financial support, does help educators and policymakers throughout the nation without interfering with their prerogatives. Coalitions, commissions and task forces can seek to define broad education goals for the nation, and to identify and analyze significant problems where new federal programs could, by common consent, make a difference. The range of such activities, taken together, would transform the phenomenon of a bully pulpit into an institutional invention that would benefit education at all levels of the nation.

The perfection of partnerships with the states betokens another shift in the times. Two decades ago, the federal government faced the hostility of some states to federal educational objectives aimed at equity and/or the limited capacity of many states to carry out those objectives. Today the states hold widely shared objectives of educational improvement for all and the ability to carry them out. They have, in fact, taken upon themselves many initiatives and burdens formerly associated with federal programs. As the federal government reenters the scene, it does so not as a balance wheel to state action, but as a supporting partner in pursuit of a common agenda.

What then are some strategies for revitalizing the federal role in education over the next two to three years?

The first is to shore up the traditional federal role after eight years of erosion and neglect, a process already under way: the last Reagan budget added a small amount to student aid programs, and President Bush has proposed additional money for Head Start. Congress seems inclined to do this much and more — adding hundreds of millions to Chapter I's programs for disadvantaged students.

The research, assessment, and dissemination efforts of the federal government may also be on the rebound. Assessment and dissemina-

tion are, in fact, two areas in which the Reagan Administration has strengthened federal programs. We should build on progress in the development of national assessment instruments and the statistical base, and we should continue to emphasize and strengthen the dissemination efforts of the federal government. The "What Works?" papers and other new dissemination efforts may have included some of the wrong things, excluded some of the right things, or come to a few wrong conclusions; but they have made many of the fruits of research available to an unprecedentedly wide audience. What we need to attend to now is the health of the research enterprise itself. Starved for funds, with declining levels of support throughout the 1980s, education research holds many of the keys to more effective learning, teaching and schooling. In education, as in health, science, agriculture and many other areas, only the federal government has the resources and perspective and patience to build a strong knowledge base for future progress.

Needless to say, all areas of federal activity are trying to make similar cases to the one I have made here with respect to extant federal programs that serve it. It is not sufficient to be simply one of many worthy supplicants for limited resources. Federal education policy must, in addition, concentrate on a few strategic steps that will furnish national leadership for educational improvement.

The costs of these needed new initiatives are, luckily, modest. We are in for two lean budget years at least, and available monies should go mostly to the largest important programs already in place. Education should stake a strategic claim to the future (beyond two or three years) when there may be substantial national readiness for large new federal investments in education.

Within such a leadership strategy, there are three initiatives the federal government should take.

First, organize a national consensual process to establish goals for American education — perhaps for the year 2000. The education debate in the '80s has substantially shifted its emphasis to questions of outcome — call it accountability if you will. Considerations of input or process will no longer be adequate measures of progress. The problems of inequality and of demographic, technological, and economic change are national problems by any definition, shared by every citizen, every locality, every state. National comparisons are increasingly available to us — the National Association for Education Progress in its newest formulation will, for the first time, permit state-to-state comparisons. Congressional legislation more and more often includes performance objectives. "A Nation at Risk" suggested specific requirements and pushed for higher standards. The National Governors Association's "Time for Results" suggested a set of standards, as did the Committee for Economic Development's reports, "Investing in Our Children" and "Children at Risk." The Children's Defense Fund in its brilliant advocacy for children sets forth standards for equality and improvement of

services. In the health field, the federal government has successfully developed and promulgated a set of attainable national goals. The question of national goals is in the air.

The Secretary of Education and the President can lead the process of defining goals for education to be sure that it focuses on shared goals and high expectations; that it promotes understanding of appropriate educational performance, and of what is involved in trying to improve it; that it sees, at the heart of the effort, the adoption of reasonable state and local objectives for progress; and that it avoids, like the plague, the use of national standards as heavy-handed instruments of uniformity and compliance.

What kinds of goals and standards are we talking about? To illustrate, a recent report by the Southern Regional Education Board suggested these goals, to be in place by the year 2000.

- All children will be ready for the first grade.
- The school dropout rate will be reduced by one-half.
- Ninety percent of adults will have a high school diploma or equivalent.
- Four out of five entering students will be ready to begin college-level work.
- Significant gains will be achieved in the mathematics, science, and communications competencies of vocational education students.
- The quality and effectiveness of all colleges and universities will be regularly assessed.
- All institutions that prepare teachers will have effective teacher education programs, placing primary emphasis on the knowledge and performance of graduates.

This is only the beginning of a set of attainable goals, but it reflects truly national concerns, and it phrases possible national goals in ways that have force and will garner advocates. This issue should, and will, be on our national agenda, and it will be beneficial to all if the process of establishing these goals is constructively guided by a federal-state-local partnership.

Second, the federal government must clearly support education reform in the nation. In addition to supplying research and demonstration dollars, it should take specific steps to strengthen the teaching profession. Even though improved pay and status are drawing many people into (and back into) teaching, shortages will persist in urban areas, among minority candidates and in the fields of mathematics and science. The federal government should provide targeted fellowships and scholarships to remedy those grievous shortages. It can also work with the states to make and keep the standards of teaching high by fostering better professional training and improved credentialing. It can provide models of excellence in urban education by reviving a perfectly good idea called the Teacher Corps, adapting it to the challenge of reform and the new people, often adults mov-

ing from other professions, now attracted to teaching.

Third, the federal government should create a new and coordinated federal focus on young children in areas of chronic and concentrated poverty. We have new knowledge in this area to guide our program design. We know, for example, that there are a million or more of these children 6 years of age or under in specific neighborhoods that have high concentrations of poor families. We can locate these children. We can develop programs that will serve them well — and not be diluted and dispersed over other millions of children. We also know in new ways what their deficits are. We know their problems are multiple. Few of these children have only one problem. They lack not only readiness for school; they also have health problems, low birth weight, difficult family and community circumstances. Often they do not have a deficit — they have a syndrome containing many deficits in many dimensions of their young lives, interacting to make each deficit worse as time goes along.

Thus, too, we know that the prescription for change must include multiple services delivered together — prenatal, infant care, health services, family and community support, early childhood and day care, and primary education.

It is in the necessary self-interest of education to support such an initiative. The schools will fail with these children unless they are helped early in ways they are not being helped today. This is not a matter of education being kind to the early childhood community. Educators must understand that they cannot accomplish their own objectives unless something is done about these poor children before they ever get to school — something very much more effective than is being done today. Led by the President and his Secretary of Education, they should be in the forefront of efforts to create high-quality institutions for early childhood development throughout the nation.

Substantial progress toward a national consensus on educational goals, consistent support for a more effective teaching force, and dramatic advances in care and education for the youngest and most helpless victims in our society: this is an ambitious agenda for national action. It builds upon the equal educational opportunity goals of existing programs without diverting the substantial resources they need. It does not usurp authority, but rather invites collaboration. It is within our reach.

As this volume goes to press (September 1989), President Bush approaches a long-awaited meeting with the governors of the 50 states to discuss education. He has not yet redeemed his campaign pledge to be an education president. Let us hope this redemption is at hand.

THE IMPERATIVE FOR GLOBAL EDUCATION

Mary Hatwood Futrell

"Domestic life, political institutions, international relations, and personal contacts are shifting with kaleidoscopic rapidity . . . We cannot appreciate and weigh the changes; they occur too swiftly . . . Our minds are dulled by the sudden and repeated impacts. We are . . . bewildered."

A recent observation? No. The year was 1931. The voice: John Dewey's. Dewey's concern was that teachers and students would be unable to absorb and respond to the jolting and disorienting pace of contemporary events.

If Dewey was worried nearly 60 years ago, he would be apoplectic today. The "kaleidoscopic rapidity" that concerned him in 1931 seems restful compared to the hyperactive pace of life as we prepare to enter the 21st Century.

Dewey's message has never before been more compelling, never before more relevant. That message explains, as well as any I know, the need to comprehensively and systemically restructure America's schools. Only then will we be able to prepare students to adapt and improvise successfully in the face of unrelenting change and unforeseen challenges. Only then will we successfully meet the challenge of helping students become mentally agile, emotionally resilient, and intellectually adventurous lifelong learners.

The challenge is great, and obstacles are everywhere. Teachers cannot hope to prepare students for this world of perpetual flux if teachers themselves remain wedded to static conceptions of effective pedagogy. Teachers cannot hope to equip students for the information age if they themselves are condemned to organizational structures derived from the industrial age. And teachers cannot hope to ready students for civic responsibility within a participatory democracy when they themselves are locked within an autocratic bureaucracy.

As a teacher, as a black woman, and as an American, I believe, in the words of Thomas Wolfe, that "the true discovery of America is before us [and] the true fulfillment of our mighty and immortal land is yet to come."

I believe that the mission of education must now and forever be defined by the needs of children and never by the greed of nations. I believe that our every action must be guided by the dictum that "we do not inherit the world from our ancestors — we borrow the world from our children."

In that borrowed world today, we face an undeniable imperative for educational improvements that will enhance America's competitive edge in the world economic community. But we must also

remember that the gross national product is not — and never can be — the sole measure of our worth as a people.

Our worth as a people will be determined by our ability to so transform education that we become a people who give as much thought to equity as to excellence, as much thought to morality as to technology, and as much thought to ethics as to economics. And I believe our prospects — and hope — for attaining these goals rest with global education.

Exactly what is global education? Global education is not solely — or even primarily — a matter of knowing world geography or mastering foreign languages or developing the savvy to succeed in the international marketplace. No, the foundation of global education is an attitude — an attitude that affirms the oneness of the human family, an attitude best embodied in the phrase “with malice toward none, with charity for all.”

We find the most compelling argument for global education in the faces of the world's children, in young hearts still untouched by prejudice and still unstained by malice. For the sake of these children — children who do not yet know how to hate or how to discriminate or how to impose their will on others — we have a responsibility to initiate and sustain international collaboration among educators at all levels.

No doubt many will label this notion idealistic. Indeed, it is. It is based on the ideal that the sameness among the peoples of the world is far more important than the differences that threaten to obscure their sameness.

It is based on the ideal that no nation has the right to deprive children of the best education on earth, the best education that the teachers of the world, working together, can develop.

It is based on the ideal that the lines drawn on the map of the world — those lines that define national boundaries — need not keep us from sharing with each other the joys and the blessings of learning.

It is based on the ideal expressed by President John F. Kennedy — the ideal that “the mere accumulation of wealth and power is available to the dictator and the democrat alike. [But] what freedom alone can bring is the liberation of the human mind and spirit.”

Yes, the proposal to forge an international educators' alliance for global understanding is idealistic. It is also practical. It is wise. It is necessary.

For part of the promise of this educators' alliance is the promise of a new kind of literacy — literacy that goes beyond traditional basics to teachings that empower individuals to think critically, to analyze information insightfully, to make judgments independently. This is literacy that opens the way to a life of dignity. This is the literacy of empowerment, literacy that adds to the “three Rs” a “C” — the ability to cope with the always-present threat of tyranny, with violence masquerading as paternalism and greed masquerading as idealism. This is the literacy of liberation.

The effort to promote collaboration among the world's educators rests on the understanding that as we approach the 21st Century, the mission of education is not to train people to *serve* the purposes of others, but to develop their capacity to *question* the purposes of others. We must equip students with "stupidity detectors." We must bolster their will to seek wisdom. We must enable them to act autonomously, to act responsibly, and — when necessary — to act selflessly. We must see to it that they understand that we are indeed our brothers' and our sisters' keepers — and, as such, are the trustees of the world that must sustain the lives of our *and their* children.

Only students empowered in this way can offer us hope for a world no longer savagely scarred by the inequities between the privileged and the deprived. Only students empowered in this way can offer us hope for a world no longer defiled by the brutal indifference of the haves toward the have-nots.

This hope will be bolstered when the divisions among the world's educators are seen for what they are — relics from the era of unbridled nationalistic ambitions. The stubborn persistence of these divisions suggests that our attitudes toward peace and national security retain the residue of attitudes that may have been appropriate in the era prior to World War II. They are not appropriate today.

Today we must understand that national security is inseparable from international security. That no nation can be free of fear so long as one nation is engulfed by fear. That no part of our planet will know peace until every part of our planet knows peace.

That is why our national interest need not blind us to the common interests we share with all nations and all peoples. Those interests can become inseparable — if we seek peace within the human family, if we dedicate ourselves to the kind of peace President Kennedy described — "peace that enables men and nations to grow and to hope and to build a better life for their children — not merely peace for Americans, but peace for all men and women, not merely peace in our time, but peace for all time."

The prerequisite for global peace is global understanding. And global understanding demands a global education that drives home the message — to again borrow President Kennedy's words — "that in the final analysis our most basic link is that we all inhabit this planet. We all breathe the same air. We all cherish our children's future. And we are all mortal."

Of course, some might ask: Is there a difference between global education and the teaching of the humanities? Yes, there is.

While a study of the humanities forces us to contemplate the past in order to better understand the present, global education helps students to rapidly incorporate and coordinate worldwide events that come at them with an all-at-onceness and demand that they see past, present, and future in the instant.

The need for this new mode of perception stems from the effects of communications technology on thinking and learning all over the globe. Because of this constantly evolving technology, we are apprised of tragedies in Bhopal, India, or Valdez, Alaska, with the same alacrity that we might hear that a neighbor accidentally fell from a ladder.

Examples of the effects of communications technology on our lives abound. Recently, while protesting students in China occupied Beijing's Tiananmen Square, nightly news host Ted Koppel interviewed a group of Chinese students living in the United States. Noticing one of the students holding a telephone, Koppel asked the student if he was receiving information from Beijing. The student replied that he was not *receiving* information but *giving* information. He was telling the protestors what was happening around them in Beijing, based on U.S. news reports.

We can wait no longer. We must act now to ensure global studies a central place in every curriculum at every grade level in every school in our nation. At the same time, we cannot beguile ourselves with the myth that formal education will, in and of itself, determine the attitudes our young people develop. For the global perspective we offer young people is — for better or worse — a function of our national character. If we, as a people, cling to narrow, provincial, belligerent perspectives, our children will do the same. Conversely, if we, as a people, embrace perspectives that respect pluralism and elevate the imperative for global understanding above the temptation of global dominance, our children will do likewise.

The challenge is clear.

If we are to meet that challenge, we would do well to take our bearings from the lesson that Dr. Martin Luther King, Jr., sought to drive home in his final work. In that book — "Where Do We Go From Here: Chaos or Community?" — King reflected on the papers left behind by a novelist who had recently died. Among the writer's papers, King discovered a plot outline for a future novel. The novel would tell the story of a widely separated family, a family divided by geography and ideology, a family whose members had long been alienated from one another — and a family that now inherits a house in which they must all live together — and somehow all live in peace.

I wish that novel had been published. That fiction would have proved profoundly prophetic of present-day realities, deeply reflective of the human condition in this, the twilight of the 20th Century. This fictional family is the human family today.

We have inherited a large house, a great "world house" in which we all must live together. It is a house of black and white and yellow and brown and red people. It is a house of Catholics and Protestants and Jews and Moslems and Hindus. It is a house in which lives a family long separated by culture, conviction, and social and economic status. It is a family that will never again live apart and so must somehow learn to live together.

Our family history is not on our side. We know its blood-stained past. We know of the wars our family has waged. Most of these wars were based on small differences in skin pigmentation, on small differences in theistic interpretation, on small differences in ideological interpretations, on petty squabbles over a small patch of land.

These wars were waged because differences that might have been treasured were instead feared. These wars erupted because diversity was not seen as the result of a divine plan but instead as the result of a satanic curse.

This is the history and legacy we must overcome. The challenge we confront is to make the world house at last a home — a home for the human family.

The answer to this challenge is education, education that is not only academically rigorous but also socially demanding, an education that teaches us not only to *endure* diversity, not only to *accept* diversity, but to *cherish* diversity. Only education can drive home the message that the teachings of the Koran and the Bible and the Talmud and the Upanishads offer, not the basis for conflict, but the basis for conciliation. Only education can help us to sow the seeds of harmony instead of the seeds of discord.

We now see — in developments still in their infancy — the faint glimmer of hope that the human spirit possesses the power to create a world where the size of our hearts counts for more than the size of arsenals.

Indeed, if we are to survive, the doctrine of mutually assured destruction must give way to a doctrine of mutually shared concerns. We must work toward the day when, from the ashes that have seared humanity, there arises the fire of a new determination, the determination to find the common ground that moves the human family toward higher ground.

This challenge will demand relinquishing our enslavement to slogans and suspicions and fears. It will demand relinquishing old myths and embracing new realities. It will demand recognizing that our common vulnerability is testimony to our indivisibility. It will demand that we speak out and that we agitate.

For agitate we must when our planet is home to one soldier per 43 people and to one doctor per 1,030 people, when more than 900 million adults are condemned to total illiteracy, and when worldwide only one citizen in four has the unrestricted right to vote.

This violence must end. And violence it is. For as the Argentinian Adolfo Perez Esquivel has noted: "Usually we speak of violence only when it has reached an extreme. But it is also violence when children are dying of malnutrition, when unions are not free, when housing is scarce and health care inadequate."

This violence has not abated. Its remedy has not appeared. We continue to give higher priority to the proliferation of deadly weapons than to the cultivation of human potential.

Can we reverse this tragic trend? Of course we can. Will we reverse this trend? That remains to be seen. But the option is there. The opportunity is there.

This opportunity to recreate ourselves and to remove the last vestiges of barbarism from what, up to now, we have called human nature is exemplified in a curriculum designed to enhance global understanding, a curriculum that is forged by educators from every nation on earth. The common link to this curriculum, forged by teachers of all colors and races, all religions and nationalities, is the single belief that "in every child who is born, the potentiality of the human race is born anew."

BUSINESS-SCHOOL RELATIONS FOR THE 1990s

Robert G. Schwartz

A commonplace of our culture is the acknowledgement that education provides the tools, and oftentimes the inspiration, for success. But, even as public schools across the country prepare young people for life's challenges, the alarms sounded over education's deficiencies point to important questions about the effectiveness of today's classrooms. Looking ahead, we ask: how well prepared are schools for the years to come? How confident are we that our children — today and in the future — will enjoy the opportunities we would wish to provide them? And if they do not, what are the likely consequences?

The emerging profile of schools of the 1990s may be viewed against what seems a deepening backdrop:

- The public school remains an important societal "common denominator" — if that changes dramatically, we can expect equally dramatic changes in society.
- We are in the midst of an opportunity for substantive change in education. If we fail to rise to the occasion, we may not see such promise again for some time.
- At stake are the development of skills essential to the nation's world economic role, and the vitality of our pluralistic society based on democratic institutions.

It is no surprise, therefore, that education has emerged as a critical issue for the 1990s.

Following nearly two decades of declining aptitude-test scores and attendant workplace problems, widespread interest in the state of education was evident by the early 1980s. As concern mounted, extraordinary public attention was focused on the nation's schools. Once high-level commissions were established, whose findings attested to the seriousness of our predicament, numerous initiatives were launched. Now, a new decade offers an opportunity to assess the current state of affairs, and to devise approaches to the next round of reforms.

This discussion centers on some of those issues that concern us all, and that have gained the attention of the business community. It attempts to encourage constructive business-school relations, and calls upon business to support education in the realm of public debate, while at the same time cautioning against interference in specific issues of school management and pedagogy. And, recommending a central role for teachers in the discussion of education reform, it suggests that business can provide opportunities for their voice to be heard.

Until lately, many companies confined their interest in schooling to the state of higher, often private, education with an eye toward

the vitality of academic institutions that provided the advanced training pertinent to their businesses. But, as mounting evidence of the long-term impact of inadequacies in earlier education captured the attention of the nation, secondary and elementary schools emerged as an appropriate focus for industry assistance.

Recent corporate distress over education reflects an apprehension that our work force will not rise to the challenges of global competition and that the United States will lose ground to the growing industrial, commercial, and technical economies of other nations. As a result, many companies have joined the movement to improve schools, and those already involved have frequently expanded their efforts to include such activities as adopt-a-school programs and business-school partnerships. As in any pioneering effort, the results, it would seem, have been mixed.

Business participation has been acknowledged as most helpful when it transcends "quick-fix" programs intended to produce a work force that suits immediate needs, and when, instead, it demonstrates an understanding of the dimensions of school problems. The challenge for the private sector is to become engaged as an informed participant, while avoiding the pitfalls that would snare an interloper. It is to bring to bear the strengths of a corporation: management and organizational skills, human and financial resources, and influence in the public realm. What seems inappropriate for business is to exercise a prescriptive role, as pedagogy is the professional responsibility of teachers. Few of us, after all — even following the remove of some years from the classroom and our experience of the "real world" — would venture to dictate to a favorite teacher how to teach. At the same time, we can all — parents and teachers, community, business, and government leaders — assume responsibility for our schools, and may act on their behalf.

In 1985 an item in one of the series of surveys of the American teacher conducted by Louis Harris and Associates for Metropolitan Life asked teachers how they felt about business-school relations. More than 9 out of 10 responded that they saw a positive effect in businesses organizing information campaigns to build public support for schools. Indeed, every company, large and small, can help educators get the word out about the needs and the accomplishments of our schools, both within local communities and, where appropriate, on a national level.

An especially troubling dimension of the climate that besets today's schools is the concern that an entire generation may enter a future plagued by deteriorating societal conditions. Such a development would endanger the traditional social function of education as the training ground for opportunity. In place of this historic role, we may see the public school lose ground even in such basic struggles as overcoming illiteracy. Because evidence for such trends signals serious danger ahead, efforts to improve education will benefit by watching these signs.

So, where should the efforts begin to prepare schools for the 1990s? First, obstacles to improvement need to be identified, enumerated, and, in some cases, demystified. Next, we should be alert to distinctions between short-term palliatives and long-term solutions. From these efforts, a consensus may develop, based on a widening dialogue and recognition of the high stakes involved, while public support is broadened. And — a critical factor — we will surely recognize from the outset that all such action is contingent upon leadership.

Of course, there will not be a single agenda for the 1990s, just as there cannot be a single defining characteristic of the school of the future. What we will see, no doubt, is a wide range of approaches among the diverse public schools that comprise our educational system. Such distinctions express the nation's belief in the local control of schools. What seems certain, too, is that, in the future, the diversity of schools will reflect the demographic trends recently projected for the 21st century by the Bureau of the Census. And, at the same time, the increasing momentum of educational reform will likely promote a wide range of experimentation — for good or, in some cases, for ill.

This effort will require that diverse parties come together to address difficult challenges: teachers, administrators, parents, students, and representatives of teacher organizations, school boards, government, business, and the community. As various groups work together, they will learn how to configure these parties for effective joint ventures.

A central challenge in the process of change will be to protect diversity while maintaining equal opportunity in a pluralistic society. We will need to assure a balance between promoting experimentation and maintaining standards. Where possible, the quality of education may best be secured through expansion of those initiatives most welcomed by teachers. And, where appropriate — where there is true opportunity of access — certain communities will continue to introduce magnet schools and parental "choice." We must, however, ensure that the promise of such programs is evaluated beside the concept of basic fairness in education: that in offering some a choice, we don't deprive others of a chance.

Unquestionably, business involvement reflects self-interest: without good schools, companies simply won't be able to hire skilled, productive workers. Sophisticated marketers will want to ensure that future consumers possess the product-differentiation skills needed to discriminate between inferior and high-quality products. While it seems apparent that in this sphere such self-interest bears the most "enlightened" stamp, there are, nonetheless, certain motives to be guarded against. We cannot expect to tailor students to existing workplace needs. For one thing, those needs will change substantially by the time the student joins the work force. But beyond such considerations, we should recognize that schools are more than a training ground for industry. While early corporate involvement may have

been guided mainly by the short-term, today a broader relationship between business and the schools is evolving. And most business leaders have demonstrated a keen appreciation of the bigger picture by the nature of their involvement in education. Increasingly, recognition grows that we must examine what the individual — the living, breathing child today enrolled in school — will need as a future adult to lead a fulfilling life and to contribute to society. These sound like old lessons, but we may need to relearn some of them in light of the enormous changes wrought in today's world. Such change compels us to think afresh certain constants like the design of the school year, the school day, and other concepts that arose from earlier, and different social requirements, and now may be outmoded.

Our efforts will be most successful to the degree that they reflect a view to the long term. Even with all its promise — and perhaps because of its vast reach — technology on the horizon will pose enormous trials. We will fail to devise adequate solutions without the expertise that can come only from excellence in education. We will also require a work force that can implement those solutions. And, just as compelling, social challenges will demand sophisticated skills for negotiating a more complex, heterogeneous society that faces complex issues in health care, the environment, drug and alcohol abuse, the impact of the aging population, race relations, and global tensions, to name but a few. The resolution of major social problems requires the participation of an informed populace and enlightened institutions; every citizen must be provided the basic skills to be productively employed, and be given a sense of social opportunity, if we are to ensure the vitality of a democratic society.

Financing significant change will have a price tag. In the long run, this cost may be offset somewhat by heading off more drastic measures. At the same time, the interrelatedness of many problems that society confronts may point to schools as a nexus in which to address these issues in an integrated, provident manner. But this approach, too, will require resources not now in place. We will all, as taxpayers, need to assess the utility of current investment against downstream costs. Can we afford to pay the price? Increasingly, the question becomes, can we afford not to? What will the future hold if we lose the battle against the problems confronted by this "generation at risk," if schools are unable to fulfill their mission of educating all our people?

At times, the cost of educational improvement alone has been cited as an explanation — if not a justification — for delays in bringing about change. Are there no solutions to this dilemma? Is cost-effectiveness alien to the climate of schools? Surely not. At the most basic level, methods must be found to take advantage of new technologies that will free teachers from administrative tasks, and to give them the tools that are available to the rest of us. And beyond these fledgling steps, we are compelled to bring to bear the full measure of our resourcefulness as a great nation.

The classroom is a crucible. It is here that teachers have the opportunity to exert substantial influence over young people, perhaps even to mold lives. If we appreciate this capacity, we may engage the critical potential of teachers to generate change while, in the wider public debate, we determine what is to become of our schools.

As mentioned earlier, the Louis Harris organization has polled American teachers yearly on behalf of Metropolitan Life. Taken as a whole, the findings represent a rich catalog of information about the impact on teachers of this decade of education reform. Beginning in 1984, teachers expressed overwhelmingly their support for change, and their willingness to become a part of the reform process. At the same time, they made it plain that they felt beleaguered from all sides. Added to this, the lack of respect and financial reward that characterized their profession had led to widespread demoralization among teachers.

According to the Harris surveys, this troubling picture has brightened somewhat. By 1989 a majority of teachers felt respected in society, and a good 10 percent more than in 1984 thought they could earn a decent salary as a teacher. While only 45 percent in that year would have advised a young person to pursue a career in teaching, now two-thirds would offer such advice. These are encouraging signs of the tangible impact that change can bring, in a relatively short time, if we get behind our schools. Enabling the teacher to make a difference may well be the rallying cry that will do the most good all around: an essential step in the development of leadership for the reforms to come.

Yet it is clear from the series of Harris polls that there is still a long way to go in helping teachers to become agents of change. Despite improvements, many are still leery of the long-term consequences of the education reform movement. Problems of stress, inadequate resources, and other working conditions will still cause many to leave teaching within their first five years in the classroom. Such factors have contributed to the teacher shortage that looms on the horizon, and that is expected to be especially acute among minority teachers. And, while public attention has probably helped in some ways (and, doubtless, hurt in others), there is no denying the tangible threat to education posed by progressively aggravated societal problems. In recent years, the percentage of teachers has increased dramatically that sees such problems worsening in the areas of drinking alcohol, drug abuse, student absenteeism, and the drop-out rate. More and more, teachers want schools to assist students and families in alleviating some of these problems. Now, all that said, the surveys demonstrate that teacher morale has been on an upward swing through these last few years, and that teachers are optimistic about the future. Can we help justify that optimism? In examining our role, might we perhaps focus on removing obstructions to teaching so that, in the long run, we tangibly improve schools and enhance the learning — and the lives — of students?

It is a truism that democratic institutions and practices are an integral factor in our success as a nation. If these are endangered, then, just as the individual will miss the opportunities afforded to earlier generations, so will we risk the promise of the coming century. Whatever our other failings, if we do not enhance educational opportunity, the social fabric will be strained by the diverging forces of upward and downward mobility, as we witness an increasingly wider gap between haves and have-nots.

An empty classroom holds the promise of the talent and the spirit brought to it by teachers and students. If we value our children, those of us outside classroom walls must stand ready to encourage the processes of learning and growth that take place in that domain, and to prepare the workplace, the home, and the community to prepare our schools for the challenges ahead.

TAKING SCHOOL REFORM SERIOUSLY

A Parable From War

Theodore R.Sizer

Once upon a time there was a country at war. This country had long had pride in its armies, but it was increasingly disturbed that its warriors seemed less and less successful. They fought hard, as always, but with increasingly limited results. Eventually, the people complained. Political leaders gathered, setting up commissions to study the army's failings. Business groups did likewise. All painted a dark picture.

The leadership decided that in order to stem the tide, light artillery pieces had now to shoot farther and the tanks had to drive faster. They gave orders that light field weapons would now fire 22 miles and that armored vehicles would average 45 miles per hour over rough terrain. They gathered together experts in military measurement and designed elaborate devices to test this weaponry. The generals were told that they were held accountable for the success of these directives. The generals turned to the colonels and informed them that they were now accountable, and the colonels so instructed the captains. The captains told the enlisted men that the light artillery was now to fire 22 miles and the tanks were to drive on the average of 45 miles per hour.

Enlisted men were delighted to find their leaders so interested in the quality of the army's fighting abilities. They too wanted the light artillery to fire shells for 22 miles and the armored vehicles to move rapidly. However, they wondered quite how this was to be done. Will they design us new field pieces that will fire that long? Will they manufacture new sorts of armored vehicles that will travel that fast? The troops on the line felt encouraged, sure that help was on the way.

However, it was not to be so. The leadership concentrated on the testing, and no new field pieces or armored vehicles were designed or built. Tests were held for improvement of existing equipment, and because of the renewed determination of the men on the line these weapons performed modestly better — but hardly at the 22-mile range or 45-mile-per-hour speed as contemplated. Nonetheless still more political leaders gathered around and urged the troops to do better with their existing paraphernalia.

Meanwhile the war itself stumbled on without result, with the troops on the line, even though encouraged and eager, continuing to fight in the traditional way with their same weaponry. The colonels and the generals and the politicians fulminated and decided that even further and more rigorous tests were needed. If test scores were low, they reasoned, the troops would fight harder, and the war would thus be won. However, they took one additional step, one which appealed to the troops on the line. They asserted that they now understood that those units fighting in the marshes required different equipment and different tactics from those fighting in the mountains, and they agreed that only the commanders in those places could best decide the equipment and tactics for that particular terrain. Accordingly, the generals and colonels

gave greater discretion to the captains and their troops on the line, thereby implying that the army might often need substantial change both in the way it fought and in the equipment it used.

The troops on the line were once again encouraged. They believed that the leaders understood both how different fighting was in varied climes and how important was the authority placed in the hands of those in the trenches to adapt in those immediate situations. They believed that, surely this time, the politicians and generals and colonels would give them the resources to plan new tactics and to design and manufacture new and appropriate equipment.

It was, however, not so to be. The orders went out that the captains and the men on the line were not really to change what they were doing fundamentally. No field manuals were jettisoned. No regulations were rescinded. The same old tests were used. The troops were to continue fighting the existing war as was, without respite; but at the same time and without additional resources they were to rethink the whole process of warfare, including the design and production of new equipment. At this point the troops in the line divided. Some wished to seize the new authority which apparently had been given and to use it as best as they were able. However, others turned cynical, throwing their hands up in the air, arguing that the generals back in headquarters were not to be trusted. The leaders give orders but never resources, they said. The leaders do not understand, and apparently do not wish to make the effort to understand.

The anguish among the people, within the leadership and particularly among the troops in the line, increased. Battles continued to be lost. Some leaders tried to encourage the troops by giving awards to units which apparently fought the battles well. However, the leaders themselves did not come into the trenches but sent their representatives, each equipped with a trivial check sheet and remaining but a few days. Not surprisingly, units of obviously varying merit ultimately received awards and could wear plumage with their uniforms. However, plumage didn't help them win battles; and the meaninglessness of the awards made the troops on the line only more cynical.

The politicians, now deeply concerned, turned to their colleague leaders in the business community. What shall we do? Some of these said that the army must improve the leadership of the troops on the line: an MBA for every captain with more credit hours of academic study before returning to the front. This was to be tougher than the old way; more 'courses taken' at the military academies by officers would result in victory (however far the artillery could fire or how fast the tanks could drive). Others suggested that private armies be raised, and that these be sent on a competitive basis into battle, with winners being promoted and given spoils. This notion seemed appealing until the political leaders discovered that these private armies expected to be provided with twice the financial resources presently available to the existing troops on the line.

Still others proposed 'choice' among units, with the more often chosen receiving special resources. However, as most units were essentially alike, subject to the regulation of existing field manuals, and as the troops in the line had neither the

experience nor the resources to design truly new tactics and equipment, this 'choice' was between martial Tweedle Dees and Tweedle Dums, both served by artillery that fired but seven miles and tanks that averaged 15 miles per hour. Frustration rose. A 'new fresh generation' of tests was ordered, ones which could in newly subtle ways establish whether a light howitzer could throw its shell an average of 22 miles and a battle tank could average 45 miles per hour over rough terrain. However, battles were still lost, and the troops on the line started to go AWOL.

To expect the army of American teachers to wage a war to lessen the nation's risk without an investment in new and appropriate weaponry and in exhaustive research and development on how it can be effectively deployed is demonstrably silly. Simply ordering that the pedagogical equivalents of light artillery now fire 22 miles or armored vehicles go 45 miles an hour or troops fundamentally change the way they do battle without an investment in new ways and means of warfare makes no sense at all. To expect an army of teachers, principals and counselors who for eighty years have been "waging pedagogical war" in a particular way with particular materials suddenly and profoundly to shift not only their practices but also the attitudes that underlie these practices without a substantial investment in research, development and training boggles common sense. And yet that is what this country is doing.

The rhetoric about education's problems is often as purple as it is apt. The research record abounds with evidence of the inadequacies of the current system. The morale of the "troops on the line" is shaken, but the best of them still choke back their cynicism. However, a response to their situation which turns largely on "accountability" and on newly delegated responsibility which is not matched by additional resources to make that responsibility workable has little merit.

The great gap in our current "war" to improve the education that we make available for youngsters is any investment to rethink, retool and retrain. With few exceptions, the recipes for educational reform largely assume the continuation of the schools as currently designed and merely ask that we push existing institutional practices ever harder. Astonishingly, even when existing practices do not square with simple common sense, there is still no challenge.

We all know that people learn at different rates at different times in different ways, yet we organize and "norm" youngsters on the basis merely of their chronological age.

We are well aware that not only do we learn at different rates but we pay more or less attention during different periods of time, the distractions of our lives being what they are; and, accordingly, the mere passage of time supposedly working on a project tells us only something about how much and how well we have mastered that project. In spite of this obvious reality, the coinage of schooling is rigidly the coinage of time — four years of English being better than three for any and all kids, 36,000 minutes

of "delivered instructional services" being mandated as better than (presumably) 34,000 mandated minutes.

From our own experience we know that little serious intellectual and imaginative activity goes on in 35-45 minute snippets, particularly if our attention is deliberately shifted to some other subject immediately thereafter. The seven "period" school day guarantees this inefficiency.

We know that if our destination is clear, we have better luck in reaching it; yet the "destinations" in most courses in which high school students enroll are fuzzy both in what is ultimately expected and at what standard. The mere, meaningless and trivializing "finishing of the textbook" or "covering the material" is often the goal, not some expression of ultimate *use* of knowledge, in terms clear and persuasive to students.

We know from our own experience that if the leaders in a work place reflect different values than the workers themselves, the workers will quickly become uncaring: if teachers are not supposed to "know" and care about the full variety of subjects, write clearly, and invest in ideas, why should students?

We know that youngsters coming to a school in a small rural community, or an affluent suburban community, or a congested and ethnically and racially diverse urban community bring to their schools different problems and opportunities; if those schools are asked to operate in precisely the same ways, obvious inefficiencies will emerge. Yet standardized procedures are the rule in the educational system.

We know that timed paper and pencil multiple choice tests properly "measure" only a limited range of intellectual and academic talent and that they disproportionately favor youngsters whose learning style is congenial with such assessment practice, yet we allow the "scores" on such tests not only to serve as the basis of any school's "effectiveness" but also to "sort out" youngsters.

We know from our own experience that we learn when we engage more or less intensely in the solution of problems that are of concern to us. In addressing these problems, we adults rarely turn to textbook-like manuals which we read in their entirety before we engage in a search for solutions. Indeed, few of us ever read a manual through; rather, we use it as a reference book. In spite of this obvious reality, we produce manual-like textbooks (which no adult ever herself or himself read, a point not lost on perceptive adolescents) and expect the children to march through these, memorizing other people's answers to other people's questions.

One can go on. Well-intentioned and generous though much school practice is, when looked at both in the light of research on learning and in the equally searching light of simple common sense and everyday experience, it fails to meet a reasonable standard. The pedagogical army is fighting its war with illogical tactics and inappropriate weaponry.

Merely arranging for the conditions for new educational tactics and weaponry to emerge will not be enough. We must *invest* in new ideas and new approaches on a consequential scale; we must create the pedagogical equivalents of military proving grounds. We must recognize that every important part of a school affects every other important part (just as every major change in tactics or equipment affects the entire battle plan in a military exercise), and we must commit to the scale and time appropriate to the task. Without such committed investment, no serious "reform" will emerge.

The contemporary school system's design emerged in the 1890's, at the time of the Spanish-American war. It was fully fleshed out, particularly with regard to high schools, by 1920, just after the World War One Armistice. Again, the design is well intentioned; but good intentions, hard work and generosity are not enough — in classrooms as well as trenches.

It will take political determination — which probably must come at the national level — to assert a (properly) blameless critique of schools as they are, and to insist that the educational establishment undefensively respond to it. It will take equal political strength to insist that the society invest heavily — financially and intellectually — in the careful rethinking of the process of schooling in this country. It will take political courage to beat back those who say that school change "always" happens slowly, incrementally; an argument will have to be carried that the entire institution must be rethought at once, as the fundamental flaws in schooling derive from its basic framework rather than from details.

To date, there appears to be little political stomach for this kind of work. It is all deemed too "radical." However, as the frustration rises — as the battles seem continually to be lost — the momentum for serious investment in redesigning and retooling the school system may emerge.

And what, people may ask, might such a system look like? Whatever final shape, it is likely to take full account of the extraordinary potential of young people to learn and to learn well; that is, the expectations and demand of the country will be considerably higher than they are now. It will take sensitive account of the differences among people, differences in how they learn, in the roots of their motivation and in the particular cultures in which they are growing up, and at the same time evolve a way of describing a common standard which is yet respectful of that variety. It is certain to give substantial authority to the "troops on the line," the teachers, principals and counselors, both because it is only they who know the particular youngsters and what those youngsters might require, but also because unless there is the opportunity to ply one's craft responsibly — and that means making decisions on the basis of the differences among particular youngsters — good people will be driven from the profession. Able people take work that entrusts them with important things. Place the important

decision making where the most important decisions must be made — at the school level — and good people will flock to school work. It will focus on what youngsters can demonstrably do, in how they *use* knowledge; it will play down the mere display of facts and the mere passage of time spent in classrooms. It will be driven, in a word, by the expectation that young people will exhibit their useful and informed power. It will be intensely respectful of the conditions necessary for young people to get into the habit of thinking hard about important things, and the routines and rituals of conventional schools which often serve to trivialize serious work will be discarded.

Again, one could go on. The general direction of reform is clear — as clear to us as fair-minded common sense. What is needed is the will to get on with it, to invest in the hard thinking and hard work — in the new weaponry and tactics — that will be necessary to train up a better army to Win the Educational War.

Joan Ganz Cooney, Chairman-CEO of Children's Television Workshop, is a native of Phoenix, and graduated from the University of Arizona. Her 1966 study for the Carnegie Corporation of New York on television and preschool education led to the founding of the Children's Television Workshop, which she has headed since its inception.

Mrs. Cooney has received numerous awards for her service to education, including the Ladies Home Journal '25 Most Important Women in American History'. She has received honorary degrees from many colleges and universities, including Princeton, Georgetown, Harvard, Notre Dame, Brown and Smith.

Mrs. Cooney is a member of the Board of Directors of Xerox Corporation, Johnson & Johnson, Metropolitan Life Insurance Company and the Chase Manhattan Bank and Corporation. Mrs. Cooney is also a member of the Council on Foreign Relations.

She is married to Peter G. Peterson, a New York investment banker and former U.S. Secretary of Commerce.

Mary Hatwood Futrell, a classroom teacher in Alexandria, Virginia, has been president of the 1.9 million-member National Education Association from 1983, until completing her most recent term in July 1989. She was re-elected to an unprecedented third term as president of the NEA during the Association's 1987 convention.

In 1987, Ms. Futrell was honored for her contributions to education by Teachers College, Columbia University, with its Medal for Distinguished Service. The Democratic National Committee Black Caucus has honored her at its annual Bethune-DuBois Fund Dinner. In 1985, *Ms.* magazine named Ms. Futrell one of 12 "Women of the Year." *Ebony* magazine honored her as the outstanding Black business and professional person for 1984 and cited her as one of the 100 most influential Blacks in America for 1985, 1986, 1987, and 1988. The *Ladies Home Journal* in 1984 named the NEA president one of the country's 100 top women.

Ms. Futrell has taken a leadership role in the new National Board for Professional Teaching Standards. In 1985, she served on the task force on Teaching as a Profession by the Carnegie Forum on Education and the Economy which produced the landmark report, *A Nation Prepared: Teachers for the 21st Century*.

She also has served on educational excellence committees of organizations such as the American Association of Colleges of Teacher Education, the American Association of State Colleges and Universities, and the Committee on Economic Development.

She has worked with the National Assessment of Educational Progress and was a member of the Carnegie Foundation's National Panel on the Study of the American High School. *Esquire* magazine included Futrell on its Board of Advisors for the 1985 *Esquire Register*. She has also served on the Board of Trustees of the Joint Council on Economic Education.

She received her bachelor's degree in business education from Virginia State College, Petersburg, Virginia, and her master's degree from George Washington University in Washington, D.C.; has completed graduate work at the University of Maryland, the University of Virginia, and Virginia Polytechnic Institute and State University; has received honorary doctorates from Eastern Michigan University and the University of Lowell, Massachusetts. George Washington University, Virginia State University, Spelman College, North Carolina Central University and Xavier University also have bestowed honorary degrees upon her.

Ms. Futrell headed the NEA Human Relations Committee, was a member of the Special Committee on Attacks on Public Education, and served on the NEA's Freedom Hall Committee, a panel furthering the construction campaign efforts of the Martin Luther King, Jr. Center in Atlanta. She was a co-convenor of the August 1983 observance of the 20th anniversary celebration of the historic march on Washington led by Dr. King.

Ms. Futrell is a member of the Select Committee on Education of Black Youth, and was appointed to the Education Commission of the States by former Virginia Governor Charles Robb in 1982, and reappointed by Governor Gerald Baliles for a term that runs to 1990. Governor Baliles also named her to his Israel-Virginia Commission.

The Virginia Education Association recognized Ms. Futrell's socially oriented public service by awarding her the Fitz Turner Human Rights Award in 1976. The National Conference of Christians and Jews twice recognized her efforts in the field of human relations.

Ms. Futrell has served on the Advisory Council to People for the American Way. She currently serves on the executive committee of the Leadership Conference on Civil Rights and the board of the U.S. Commission for UNICEF, and served five years as president of ERAmerica, a national group dedicated to passage of the Equal Rights Amendment. She is a member of the Women's and Labor Councils of the Democratic National Committee.

In 1980 she was invited to join the NEA delegation to an international teachers' conference in Tel Aviv and in 1982, returned to observe Israeli schools at the invitation of the Israeli Teachers Union.

Ms. Futrell has traveled to the People's Republic of China under the sponsorship of the Ford Foundation and the National Committee on U.S.-China

Relations, invited to visit by the All-China Women's Federation. In 1987, she returned, leading a 64-member NEA delegation. In 1981, the U.S. Secretary of State appointed her to the U.S. National Commission for the United Nations Education, Scientific, and Cultural Organization (UNESCO). In 1984, Ms. Futrell also led an NEA delegation that studied the Japanese education system and the operation of Japan's schools.

In 1985, she was elected to the executive committee of the World Confederation of Organizations of the Teaching Profession (WCOTP). She also has chaired the WCOTP Women's Caucus since 1984 and the WCOTP Finance Commission since 1986-87.

Mary Hatwood Futrell and her husband, Donald Futrell, also a classroom teacher, live in Lorton, Virginia.

Patricia Albjerg Graham is Dean of the Harvard Graduate School of Education and the Charles Warren Professor of the History of American Education at Harvard University.

Ms. Graham was first a classroom teacher and guidance counselor, and has been a lecturer and assistant professor at Indiana University, a visiting professor at Northern Michigan University, and a professor of history and education at Teachers College, Columbia University. In 1972-73 she was awarded a John Simon Guggenheim Fellowship. She has served as Dean of the Radcliffe Institute and as Vice-President of Radcliffe College. She joined the faculty of the Harvard Graduate School of Education in 1974. In the spring of 1977 she was appointed by the President of the United States as the Director of the National Institute of Education, then the federal government's educational research agency.

The research interests of Ms. Graham are exemplified by her three books: *Progressive Education: From Arcady to Academe* (1967), *Community and Class in American Education* (1974), and *Women in Higher Education* (co-edited with W. Todd Furness, 1974). She has published a number of articles, including "Women in Academe," *Science* (1970); "America's Unsystematic Education System," *American Education* (1974); "Expansion and Exclusion: A History of Women in Higher Education," *Signs* (1978); "Whither Equality of Educational Opportunity?" *Daedalus* (1980); "Literacy: A Goal for the Secondary Schools," *Daedalus* (1981); "Wanting it All," *Wilson Quarterly* (1984); "The Cult of True Womanhood: Past and Present," *All of Us Are Present* (1984); "Schools: Cacophony About Practice, Silence About Purpose," *Daedalus* (1984); and "Black Teachers: A Drastically Scarce Resource," *Phi Delta Kappan* (1987).

In addition to her teaching and research activities, Ms. Graham serves on the boards of the Josiah Macy, Jr., Foundation, the Northwestern Mutual Life Insurance Company, Science Research Associates, the Spencer Foundation, the Johnson Foundation, the Hitachi Foundation, and the Carnegie Foundation for the Advancement of Teaching. She is president of the National Academy of Education, and vice-president of the American Historical Association. She has served on the National Science Board Commission on Precollege Education in Science, Mathematics and Technology and the Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy.

Ms. Graham holds a bachelor's degree "with highest distinction" from Purdue University. Her Ph.D. is from Columbia University, and she has received several honorary degrees. She is married to Loren R. Graham, and they have a daughter, Marguerite.

Michael W. Kirst, Director of Policy Analysis for California Education (PACE) has been Professor of Education and Business Administration at the Stanford University School of Education since 1969. His M.P.A. in Government and Economics and his Ph.D. in Political Economy and Government were both earned at Harvard University; his undergraduate work, which led to an A.B. in Economics, was conducted at Dartmouth College.

Dr. Kirst was Associate Director of the President's Commission on White House Fellows, Director of Program Planning and Evaluation in the U.S. Office of Education's Bureau of Elementary and Secondary Education, and Staff Director of the U.S. Senate Subcommittee on Manpower, Employment and Poverty. From 1975 until 1981 he served on the California State Board of Education, from 1977 as its president, during which time he was also a Commissioner and steering committee member of the Education Commission of the States. He has published in numerous journals, including *Educational Administration Quarterly*, *Policy Studies Review*, and *Phi Delta Kappan*; and has contributed to such collections as *State Education Reform* and *Individual Differences and the Common Curriculum*.

Floretta Dukes McKenzie is president of The McKenzie Group, a comprehensive educational consulting firm offering a range of direct assistance services to both public and private organizations. The firm specializes in finding practical, effective approaches to today's complex instructional issues and in providing the best in management analysis, planning, evaluation and or-

ganizational development services. Among The McKenzie Group's clients are Anchorage, Dallas, Denver, Durham, Milwaukee, Oakland, Pittsburgh and St. Louis Public School Systems, the Michigan State Department of Education, the Josiah Macy Jr. Foundation, Jostens Learning Corporation, the Joint Center for Political Studies, The Council of the Great City Schools and the McGraw-Hill Publishing Company. Dr. McKenzie was formerly Superintendent and Chief State School Officer for the District of Columbia Public Schools, the 21st largest school system in the nation with an enrollment of nearly 89,000 students, an employee population of 13,000, and a yearly budget totaling in excess of \$400 million. She has also served as Deputy Assistant Secretary, Office of School Improvement, U.S. Department of Education; U.S. Delegate to UNESCO; Deputy Superintendent of Schools, Montgomery County Public Schools; and Assistant Deputy Superintendent, Maryland State Department of Education. In addition, Dr. McKenzie serves on the boards of the National Geographic Society, the Potomac Electric Power Company (PEPCO), the Riggs National Corporation, The George Washington University, WETA public television, Reading is Fundamental (RIF), the Boy Scouts of America, and others. In the Spring of 1990, Dr. McKenzie will become a distinguished visiting professor at Harvard University's Graduate School of Education.

Milbrey Wallin McLaughlin is Associate Professor of Education, Stanford University, and Chair, Evaluation Training Program. For ten years he served as Senior Social Scientist at The Rand Corporation, to which he has consulted since 1983. His Ed.D. and Ed.M., both in Education and Social Policy, were awarded by Harvard University, and his B.A. in Philosophy by Connecticut College.

Dr. McLaughlin has conducted many studies for The Rand Corporation, and his work has appeared in such journals as the *Peabody Journal of Education*, *Phi Delta Kappan*, and *Harvard Educational Review*.

Joseph Samson Murphy has served as Chancellor of The City University of New York since 1982. Prior to his appointment, he was President of Bennington College for six years and President of Queens College for six years. Dr. Murphy was Vice Chancellor of Higher Education for New Jersey and served as Director of the Peace Corps in Ethiopia and in the Caribbean and as Associate Director of the Office of Economic Opportunity.

Dr. Murphy received his baccalaureate with honors in Philosophy from Olivet College in 1955. He was awarded an M.A. in 1959 and a Ph.D. in

Philosophy and Political Theory in 1961 from Brandeis University. He is a Woodrow Wilson Fellow and a Graham Kenan Fellow.

Chancellor Murphy is the Chairman of the National Pell Grant Coalition and the Coalition for Aid to Part-time Students. As Chancellor of the third largest university in the nation (and the largest urban university), he leads a system of twenty-one colleges, serving over 180,000 students — including a law school and two medical schools.

He is the author of *Political Theory: A Conceptual Analysis*, and has published numerous articles on philosophy, political theory, and education.

Chancellor Murphy has three children: Lisa, Susanne, and Peter. He is married to Susan Crile and lives in Manhattan.

Kim Natale is a physics teacher at Standley Lake High School in Westminster, Colorado. Standley Lake is a new Jefferson County High School that opened this year. Before that Kim taught at Pomona High School in Arvada where he had taught since the school opened in 1973. When he arrived only 13 students signed up for physics. His last year at Pomona over 320 students took physics.

In 1984 Kim was selected as Colorado Teacher of the Year and was one of four finalists for the National Teacher of the Year. In 1985 Kim was selected as one of Colorado's nominees for the Teacher in Space program. He competed, along with over 100 other nominees, for the opportunity to ride on the ill fated Challenger Space Shuttle mission. Also in 1985 Kim was selected as the Arvada "Man of the Year." In 1989 Kim was selected as one of three Colorado state finalists for the Presidential Award in Science and Mathematics Teaching.

Kim currently serves on the board of directors for the Colorado Public Employee's Retirement Association. He is one of five teachers elected statewide to serve on that board. He is also serving on the Metropolitan Life Foundation Education Advisory Board. He is one of two teachers nationwide serving on the board, responsible for awarding over \$300,000 in grants each year.

Kim is the author of two published magazine articles in *The Physics Teacher* magazine, a contributor to *Facts on File*, and is a frequent guest speaker at school assemblies and education forums.

Kim and his wife Georgia have one son in seventh grade and triplet sons in fourth grade. He lives in Arvada, Colorado.

Frank Newman is President of the Education Commission of the States (ECS). ECS is a 22-year-old compact of states created to assist state political and education leaders in making education policy by undertaking education research and policy analysis, providing clearinghouse functions and technical assistance, sponsoring a variety of forums on policy issues and other means of encouraging implementation. ECS has a staff of 50 headquartered in Denver, Colorado.

Dr. Newman has a diverse background in education administration, higher education and policy formation. Although he has written numerous articles and publications, he is most widely known as the author of the Newman reports (Report on Higher Education, 1971; and National Policy and Higher Education, 1974). He developed these reports while serving as chairman of two task forces established by Secretaries of Health, Education and Welfare (1969-73). In 1983, he became a Presidential Fellow at the Carnegie Foundation for the Advancement of Teaching; in 1985, he published the report, "Higher Education and the American Resurgence." In 1987 he published "Choosing Quality: Reducing Conflict Between the State and the University." He was President of the University of Rhode Island (1974-83) and Director of University Relations at Stanford University (1967-74).

He is a trustee of Barnard College; a Charter Member of the Board, Colorado College; and a member of several advisory boards.

He holds a Ph.D. in history from Stanford University, a master of science in business from Columbia University, a bachelor of science in engineering from Brown University and a bachelor of arts in naval science and economics, also from Brown University.

Dr. Newman is married to Lucile Newman, an anthropologist, who is a faculty member in Community Health, at Brown University. They have three sons.

Robert G. Schwartz is chairman, president and chief executive officer of Metropolitan Life Insurance Company.

Mr. Schwartz joined Met Life in 1949 upon graduating from Penn State University with a degree in business administration. A year later he was given a leave-of-absence to serve with the U.S. Army during the Korean conflict. When he returned to Metropolitan in 1952, he trained as an auditor, and began matriculating in the evenings at the graduate business school of New York University.

Upon receiving an M.B.A. degree from N.Y.U. in 1956, Mr. Schwartz joined the company's securities investments operation, and six years later was elected an officer. Following numerous assignments in Met Life's investment activities, and after additional senior appointments, in 1980 Mr. Schwartz was elected to Met Life's board of directors as vice-chairman and was also named chairman of the investment committee. In 1983 he was elected chairman of the board; he assumed the posts of president and chief executive officer in September 1989.

He also serves as chairman of Metropolitan Asset Management Corporation, and as a board member of State Street Research & Management Company, among other Metropolitan subsidiaries.

Mr. Schwartz presently serves on the boards of directors of CS First Boston, Inc., Communications Satellite Corporation (COMSAT), Lowe's Companies, Inc., Mobil Corporation, and Potlatch Corporation. He is a trustee of the Committee for Economic Development and a member of the Economic Club of New York. From 1982 to 1984 he served as a member of the President's Export Council.

Currently he serves as a member of the board of overseers of New York University's schools of business. He is a trustee of the National Urban League, and a vice-chairman of the board of The Greater New York Councils of the Boy Scouts of America. Other business affiliations include the Urban Land Institute, the Providence Loan Society of New York and the Pennsylvania Society.

In addition to being the 1981 recipient of the Alumni Achievement Award from New York University's Graduate School of Business Administration, Mr. Schwartz received, in 1983, Penn State's Distinguished Alumni Award, its highest honor for alumni achievement.

Mr. Schwartz resides with his wife, Caroline, in Princeton, N.J. They have three grown children.

Albert Shanker is president of the 700,000-member American Federation of Teachers (AFT) and has been re-elected to that position every two years since 1974. Mr. Shanker also serves as a vice-president of the AFL-CIO, the president of its Department of Professional Employees, and as the president of the International Federation of Free Teachers Unions. From 1964 to 1986, Mr. Shanker was president of New York City's United Federation of Teachers, which under his leadership was the first organization in the United States to win collective bargaining rights for teachers.

Widely known as the pioneer of the American teacher union movement, Mr. Shanker has also had a long career as an advocate of public education and a leader in its reform. Through his weekly column in the *Sunday New York Times*, "Where We Stand," as well as through numerous articles, speeches and television appearances, Mr. Shanker has taken fresh and provocative positions on the professionalization of teaching, school governance and management, and educational standards and content. In the last eight years especially, Mr. Shanker has criss-crossed the country with the message that the traditional ways in which we organize teaching and learning in America are implicated in our educational crisis and must be rethought and reworked.

Mr. Shanker has also long been involved in national and international organizations dedicated to promoting civil and human rights, including the A. Philip Randolph Institute, the National Endowment for Democracy, and the Committee for the Defense of Soviet Political Prisoners. He holds numerous honorary degrees, is on the advisory boards of many national organizations, and is the first labor leader to be elected to the National Academy of Education.

Sherleen Sisney holds a bachelors degree in secondary education in social science from Oklahoma State University and a masters degree from the University of Louisville in Kentucky. Mrs. Sisney's teaching career started in Merrill Junior High School in Denver, Colorado in 1968. She has taught in Monterey, California, and since 1971, she has been at Ballard High School in the Jefferson County public schools in Louisville, Kentucky, the 19th largest system in the country, where she teaches advanced American history, economics and political science. She is a member of the Jefferson County, Kentucky and National Educational Associations, Phi Delta Kappa Educational Fraternity, Kentucky and National Councils for the Social Studies.

Following many local recognitions for excellence as a teacher, Mrs. Sisney was named outstanding teacher in 1983 by Phi Delta Kappa, Kentucky Teacher of the Year in 1984, and National Teacher of the Year in 1984. This award for excellence in teaching is the oldest and most prestigious award of its kind in the field of education, and is sponsored by the Council of Chief State School Officers, Good Housekeeping, and the Encyclopedia Britannica companies. It is now in its 40th year.

As a member of the Junior League of Louisville, Mrs. Sisney helped institute a highly successful "Schools/Business" project for the Jefferson County Public Schools.

In 1984-1985 Mrs. Sisney served as project director of New Foundations in Education, a program designed to facilitate the inflow of business and community resources to the public schools. She has made numerous appearances in school districts in support of the Kentucky Council for Economic Education.

She has chaired and/or served on numerous task forces and conference planning committees, such as the Governor's Task Force on Education Reform, the Governor's Partnership Conference Advisory Council and the Louisville Community Foundation Teacher Awards Program. She has served as a member of the Oklahoma State University Centennial Advisory Commission and the Kentucky Council on Economic Education Board of Trustees.

Mrs. Sisney is married to a Louisville Attorney, Lee Sisney. They have a 10-year-old daughter, Shara Lee.

Theodore R.Sizer is Chairman of the Brown University Education Department, which he joined in 1983 as Visiting Professor. Since 1984 he has served as Chairman of the Coalition of Essential Schools. Formerly Headmaster of Phillips Academy, Andover and Dean of the Graduate School of Education at Harvard University, he is a former Guggenheim Fellow, and has been awarded honorary degrees by a number of institutions, including, most recently, Dartmouth College, Williams College, and Lowell University. He earned a Ph.D. in Education and American History at Harvard, where he was also awarded an M.A.T. in Social Studies.

Dr. Sizer has written widely on education. He is the author of *Secondary Schools at the Turn of the Century*, *Places for Learning*, *Places for Joy: Speculations on American School, Reform*, and *Horace's Compromise: The Dilemma of the American High School*. He has edited a number of publications, among them *The Age of the Academies*, *Religion and Public Education*, and, with his wife Nancy Faust Sizer, *Moral Education: Five Lectures*. Among other honors, The Council for the Advancement and Support to Education awarded him its Gold Medal for Excellence in Undergraduate Education. In 1988, he was elected a member of the National Academy of Education. Born in New Haven, Connecticut, he and his wife have four children and live in Providence, Rhode Island.

P. Michael Timpone is the President of Teachers College, Columbia University, the world's most comprehensive graduate school for the preparation of educating, psychological, and health professionals. He served previously as Dean of Teachers College, and as the Deputy Director and Director of the National Institute of Education. He is the author of numerous articles on education policy.

This collection contains the observations of leaders in American education as they reflect on the schools that will take shape in our communities over the next few years. The authors of *Preparing Schools for the 1990s* address the possible contours of education as public schools emerge from a decade of challenge and change. Their concerns span a wide range of issues, while unified by a look forward at the near-term future. Metropolitan Life Insurance Company presents the views of these authorities to augment the national discussion on a critical issue for our time.

CONTENTS

"Using Current Technologies in Education"

— *Joan Ganz Cooney, Chairman and CEO,*
Children's Television Workshop

"The Imperative for Global Education"

— *Mary Hatwood Futrell, Past President,*
National Education Association

"Revolution in Pedagogy"

— *Patricia Albjerg Graham, Dean,*
Graduate School of Education, Harvard University

"Rethinking Children's Policy: Implications for Educational Administration"

— *Michael W. Kirst, Chairman,*
Administration and Policy Analysis, School of Education, and
Milbrey McLaughlin, Associate Professor of Education,
Stanford University

"The Implications and Rewards of Teacher Empowerment"

— *Floretta Dukes McKenzie, President,*
The McKenzie Group

"Class and Caste in American Schools"

— *Joseph S. Murphy, Chancellor,*
The City University of New York

"Education Reform: The Good, the Bad, and the Ugly"

— *Kim Natale, Teacher,*
Standley Lake High School, Westminster, Colorado

"Changing the System of Schooling So That the School of the Future Has a Chance"

— *Frank Newman, President,*
Education Commission of the States

"Business-School Relations for the 1990s"

— *Robert G. Schwartz, Chairman, President and Chief Executive Officer,*
Metropolitan Life Insurance Company

"Incentives for Reform"

— *Albert Shanker, President,*
American Federation of Teachers

"Teacher Leadership in Reforming Education"

— *Sherleen Sisney, Teacher,*
Ballard High School, Louisville, Kentucky

"Taking School Reform Seriously — A Parable From War"

— *Theodore R.Sizer, Chairman,*
Department of Education, Brown University

"A Federal Education Agenda for the '90s"

— *P. Michael Timpone, President,*
Teachers College, Columbia University

The essay collection serves, in part, as a companion piece to
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Preparing Schools for the 1990s.**

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